

ED 023 814

VT 004 692

By -Hathaway, Dale E.; Waldo, Arley D.

Multiple Jobholding by Farm Operators. Research Bulletin 5.

Michigan State Univ., East Lansing. Agricultural Experimental Station.

Pub Date 64

Note -80p.

EDRS Price MF -\$0.50 HC -\$4.10

Descriptors - *Farmers, Geographic Regions, Individual Characteristics, *Multiple Employment, Part Time Jobs, Seasonal Employment, Wages

The extent and nature of multiple jobholding by persons who reported income from farm self-employment was studied by examining Social Security data for 1957, 1958, and 1959. Hypotheses were that multiple jobholding is a method used by farmers who are underemployed in agriculture to supplement earnings and that off-farm sources of employment tend to be subject to cyclical instability and diminishing employment levels. It was found that the incidence of multiple jobholding by farm operators was widespread geographically, inversely related to age, not related to income from self-employment, and not a continuous situation. The most frequent source of off-farm wage employment was some unit of government, especially among older, white farm operators with higher levels of self-employment income. Younger farm operators were more frequently employed in manufacturing, mining, and wholesale and retail trade. Earnings from off-farm employment were lowest in the South and highest in the Northeast and Pacific regions. Multiple jobholding fell in three categories. (1) a first step in changing occupations, (2) a sporadic income supplement, and (3) a substantial income source. (JM)

c1

Research Bulletin 5

1964

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

Multiple Jobholding by Farm Operators

an

**Interregional Publication for the
State Agricultural Experiment Stations**

ED023814

MICHIGAN STATE UNIVERSITY

Agricultural Experiment Station

Department of Agricultural Economics

East Lansing, Michigan

VT004692

TABLE OF CONTENTS

	Page
Summary	5
Introduction	7
The Frequency of Multiple Jobholding by Farm Operators	9
Regional Distribution	10
Multiple Jobholding and Age	12
Self-employment Income and Multiple Jobholding	13
Multiple Jobholding Through Time	14
Summary	16
The Nature of Off-farm Employment of Farm Operators	17
Regional Distribution	17
Age and Type of Employment	18
Net Income from Self-employment and Type of Employment	19
Employment Status and Continuity of Multiple Jobholding	21
The Industry of Wage Employment of Farm Operators	22
Regional Distribution	24
Age and Off-farm Wage Employment	27
Self-employment Income and Industry of Employment	29
Race, Sex and Industry of Off-farm Employment	30
Summary	31
The Rewards from Off-farm Employment	31
Regional Distribution	33
Age and Earnings from Off-farm Wage Employment	35
Wage Earnings and Income from Self-employment	38

ED023814

	Page
Sex, Race and Off-farm Wage Earnings	41
Wage Earnings by Industry of Employment	42
The Rewards of Continuous Multiple Jobholding	43
Appendix A—The Source and Nature of the Data	46
Appendix B—The OASDI Farm-operator Labor Force Compared with Other Data on Farm Operations	51
The OASDI Farm-operator Labor Force	51
Enumerative Data	51
Sample Data	52
Current Population Survey	53
The Farm Population	54
Industry and Occupation	57
Recipients of Farm Self-employment Income	58
Census of Agriculture	61
Definitions and Procedures	61
Number of Farm Operators	62
Regional Distribution of the Farm-operator Labor Force ...	67
Characteristics of Farm Operators	69
Race	75
Sex	77

FOREWORD

FEDERAL FARM PRICE and income programs, perhaps more than any factor other than technology affect the extent and number of farmers who hold nonfarm jobs. The surplus labor resource made available from farms is an economic factor on which both rural and urban interests need more information. Specific information on the nature of nonfarm jobs, regional and seasonal variation in nonfarm employment and the income to farmers from nonfarm employment has been scanty. This study taps a source of information not previously used to provide more specific information in this area than has previously been available.

The study was conducted by Agricultural Experiment Station research economists under an interregional project entitled, "Impacts of Present and Proposed Agricultural Price and Income Programs." The results published here should be useful in evaluating farm income and area development policy.

C. Peairs Wilson,
Interregional Administrative Adviser

**INTERREGIONAL COMMITTEE ON IMPACTS OF PRESENT
AND PROPOSED AGRICULTURAL PRICE
AND INCOME PROGRAM**

Members of the Technical Committee

Jimmye Hillman	Arizona
Elmer L. Menzie	Arizona
Geoffrey Shepherd	Iowa
Lawrence Witt	Michigan
Dale Hathaway	Michigan
Elmer Learn	Minnesota
James Hassler	Nebraska
George Tolley	North Carolina
Luther Tweeten	Oklahoma

Members of the Executive Committee

Kenneth Robinson, New York	Northwestern Region
Harold Halcrow, Illinois	North Central Region
Don Paalberg, Indiana	North Central Region
Robert Rudd, Kentucky	Southern Region
Harold Hollands, Oregon	Western Region
Sidney Hoos, California	Western Region
Varden Fuller, California	Western Region

Representatives of the U. S. Department of Agriculture

Bennett S. White	Cooperative Research Service
Lloyd Halvorson	Cooperative State Research Service

Members of the Administrative Advisors Committee

George Dow, Maine	Northeastern Region
C. Peais Wilson, Kansas	North Central Region
William A. Seay, Kentucky	Southern Region
Roy Huffman, Montana	Western Region

SUMMARY

ALMOST ONE-THIRD of the income of the farm population in the United States now comes from nonfarm sources. A major portion of this nonfarm income is obtained by farm operators working off their farms in addition to the operation of their farm. This bulletin investigates the extent, nature, and earnings of farm operators who were multiple jobholders in the years 1955-59, utilizing data obtained from the Social Security Administration.

The incidence of multiple jobholding by farm operators was widespread geographically. Its frequency was inversely related to age, with the incidence of off-farm wage employment especially high among younger farm operators. Multiple jobholding was not related to the operator's income from self-employment, although the type of off-farm employment was related to income. Thus, off-farm wage jobs were more frequently held by farm operators with lower self-employment income. The industry of employment also appeared associated with income from self-employment.

Multiple jobholding is not a continuous situation for most farm operators. Only a small fraction of those having off-farm earnings in any one year have such earnings for five continuous years. Persons with nonfarm self-employment in addition to farm self-employment were most likely to be continuous multiple jobholders. Those who worked for wages off their farm were more likely to do so only intermittently.

The most frequent source of off-farm wage employment was some unit of government. This type of employment was most common for older, white farm operators with higher levels of self-employment income. However, most of these jobs were only temporary or part-time; the earnings from them were very low and the year-to-year continuity also was relatively infrequent.

Younger farm operators who had lower farm income were more frequently employed in manufacturing, mining, and wholesale and retail trade. They generally received larger wage earnings, indicating their off-farm employment was of a more regular nature.

The patterns of off-farm employment and earnings by farm operators varied from region to region. By and large, the variations were

consistent with total employment and earnings patterns for the population. Thus, earnings from off-farm employment were lowest in the South and highest in the Northeast and Pacific regions.

Indications are that, for most farm operators, off-farm wage employment is a seasonal or occasional matter, supplementing farm income but not a major second income stream. Farm operators who were continuous multiple jobholders had substantially higher incomes than those who were not multiple jobholders. Also, those with wage employment in the previous year had much higher average wage earnings than those who did not. Thus, multiple jobholding appears to pay those who participated in it fairly well, although they are relatively few in number.

There were indications that the 1958 recession affected the rate of multiple jobholding by reducing the number of farmers having off-farm wage employment. There also was a cyclical decline in the income from wage employment in several industries. The youngest and oldest members of the farm-operator labor force seemed to bear the brunt of the cyclical fluctuation in employment and income.

It appears that multiple jobholding by farm operators falls into three categories. For many it is the first step in changing occupations. These farmers leave farming if they are successful in obtaining and maintaining off-farm employment for a year or two. For another group of farmers, off-farm employment is a sporadic income supplement which occurs as a result of modest participation in the nonfarm labor force on a limited or irregular basis. Such persons are primarily farmers and probably will remain so, with some off-farm work on a limited basis as the occasion arises. A third group of farm operators work off the farm regularly and substantially enhance their income as a result. The number of such persons is small, however, compared to that of the first two groups. Thus, the proportion of multiple jobholders who can correctly be termed part-time farmers on a permanent basis is relatively small, despite the common use of that term to describe farm operators who work off their farms.

Multiple Jobholding By Farm Operators

By DALE E. HATHAWAY and ARLEY D. WALDO¹

Introduction

AGGREGATE ESTIMATES of the income of the farm population show, in recent years, that income from nonfarm sources is an important and rising portion of their total income. In 1962, the income of the farm population from nonfarm sources amounted to just over one-third of their estimated total personal income.² Moreover, the chronic production of farm products in excess of commercial market requirements indicates that a substantial expansion of aggregate farm output is not a solution to the problem of inadequate income of farm people. Individual farmers have recognized this and have, by their personal initiative, seized the opportunity for employment outside of agriculture, on a full- or part-time basis, when such employment became available. This report is the first of two reports that will investigate the nature of the nonfarm employment of farm people. This one concentrates upon the experience of those farm operators that can be classified as multiple jobholders; the second will deal with those who leave farming for nonfarm employment.

The phrase, "part-time farming," has become a common one in the vocabulary of United States agriculture. It is, however, more than slightly misleading as an accurate description of what should more accurately be described as multiple jobholding. Part-time farming suggests that the individual has a full-time nonfarm occupation which is his primary source of income and that he then engages in some farming activities of a somewhat perfunctory nature as an income supplement or hobby. The term, "multiple jobholding," carries no such prejudgment as to which of an individual's economic activities is his major one; in fact, it does not require that any single activity be classified as more important than any other. All that multiple jobholding implies is that by some classification the individual is one

¹Professor of Agricultural Economics, Michigan State University, and Assistant Professor of Agricultural Economics, University of Minnesota, respectively. The authors wish to acknowledge the assistance of Brian B. Perkins, Assistant Professor of Agricultural Economics, University of Guelph, who was responsible for much of the data processing. None of the research would have been possible without the assistance and cooperation of many persons in the Social Security Administration.

²*Farm Income Situation*, FIS191, July, 1963, Economic Research Service, United States Department of Agriculture, Washington, D. C.

who is engaged in more than a single occupation or economic activity which produces income. This report deals with those individuals who could be identified as multiple jobholders in the Social Security files and who reported income as a farm operator as one of their sources of income.³ Thus, the discussion deals primarily with farm operators who report earned income from sources other than the operation of their farm.

In the analysis that follows, one of the problems is that of identifying the population to be included in the sample in a given year. It is obvious that an individual should be included in the sample of multiple jobholders in a year in which he is so classified. But, what if he only is in this category in one year? This was handled largely by doing the analysis one year at a time, defining those who were multiple jobholders in that year as the population sample. In parts of the analysis, attention is given to continuity and change, and the population included in these analyses is defined in each case.

Social Security coverage was first extended to farm operators in 1955, but the nature of the program and lack of information about it in the first year reduced participation. In addition, major changes in the legislation regarding eligibility were instituted in 1956. Thus, it was felt that the data were most useful starting with the year 1957, especially that portion of it which dealt with off-farm employment. Therefore, most of the analysis deals with the years 1957, 1958, and 1959. Data for years subsequent to 1959 were not available for processing early enough to be included in this analysis.

This study concentrates upon the extent and nature of multiple jobholding by persons who reported income from farm self-employment as one of their sources of earnings in the year in question. No attempt was made to adjust the Social Security Continuous Work-History Sample to make it correspond to, or representative of, other groups defined as farm operators. Indeed, it might be argued that this sample is more representative of those who are truly dependent upon farming as a source of income than is the Department of Agriculture method of defining one operator per unit defined as a farm or the Bureau of Census practice of defining one's occupation by selecting the one involving the greatest number of working hours in a given week. If a place defined by the Census as a farm produces too little income to qualify the operator for Old Age and Survivors Disability In-

³The nature and source of these data is described in Appendix A, together with some of the limitations experienced in their use for research purposes.

surance (OASDI) under the optional reporting method, it is not a farm in any meaningful economic sense. Appendix B compares these data with those from other sources, and it points out that the OASDI farm operators are roughly comparable to those defined as operators of commercial farms by the Census of Agriculture.

Several hypotheses regarding multiple jobholding by farm operators were tested in this study. One was that multiple jobholding by farm operators is a method whereby large numbers of farmers who are under-employed in agriculture consistently supplement their earnings as farm operators by off-farm employment. This implies (1) that multiple jobholding is widely and relatively uniformly distributed geographically among farm operators, (2) that multiple jobholding is an inverse function of income from farming, and (3) that multiple jobholding is a permanent characteristic of large numbers of self-employed farmers.

Another hypothesis was that the off-farm sources of employment of multiple jobholders in agriculture tend to be concentrated in industries subject to substantial cyclical instability and to diminishing levels of employment arising from technical change. This study does not deal with the experience of farm operators who subsequently leave farming for other occupations or with those who enter agriculture from other occupations. These will be dealt with in a subsequent report on occupational mobility of farm workers.

THE FREQUENCY OF MULTIPLE JOBHOLDING BY FARM OPERATORS

The rate of multiple jobholding by farm operators depends upon the particular definition of farm operators used in the statistics. In a rough way, given the differences in definitions, the statistics from different sources are in agreement. OASDI data suggest that about one-third of those persons who are farm operators in a given year also have earnings from other gainful employment. Moreover, these data suggest that the proportion of farm operators with this type of employment is relatively stable from year to year. Despite some fluctuations in the total numbers of persons classified as farm operators in the OASDI records, there is a surprising stability in the percentage of farm operators classified as multiple jobholders during the years 1955-59 (Table 1). The percentage was between 28.5 and 29.2 in each of the

five years, and there was no trend apparent. Thus, these data, if used in a simple cross-sectional analysis for any one year suggest that multiple jobholding is a stable situation involving almost one-third of the operators of commercial farms. This is consistent with Census and other data which cannot identify individuals from one period to the next. It will be seen later that the aggregate year-to-year stability is somewhat misleading, and that continuous register data provide a substantially different picture.

Regional Distribution

The OASDI data obtained on farm operators did not identify the location of the farm producing farm self-employment earnings in 1955.

TABLE 1—Estimated rate of multiple jobholding for OASDI farm operators, conterminous United States, 1955-59

Year	Percentage Rate of Multiple Jobholding
1955	29.2
1956	28.5
1957	29.1
1958	28.5
1959	29.0

Note: Estimated from sample data.

Source: 1937-60 Continuous Work-History Sample.

The location was included in 1956 and subsequent years, but employee-employer cards were not obtained for the OASDI sample for 1955. Thus, most of the analysis that follows covers the years 1957, 1958, and 1959. Moreover, because some records fail to contain the location of the farm, the operator's age, or some other data, certain records were excluded in these tabulations but included in the gross tabulations on multiple jobholding.⁴

Table 2 shows the rate of multiple jobholding by geographic region in the conterminous United States in each of the three years. In each year, the most marked deviation from the average rate of multiple jobholding by farm operators was found in the West North Central region. The rate in that region was about one-third lower than in most of the other regions. The rate of multiple jobholding also was consistently lower in the East North Central region, which is somewhat

⁴This accounts for minor differences in total rates from table to table in the material that follows. Wherever location or another classification item was missing, the records were excluded from the detailed analysis, but included in the total analysis.

surprising given the industrial nature of the area. Part of this may be because, in this region, the off-farm employment of farm operators may provide wage earnings high enough to reach the cut-off limit on the amount to be covered for Social Security purposes so that a higher proportion are excluded from our data. The uniformly high rates of multiple jobholding in the South and Mountain regions is somewhat surprising in view of the general belief that multiple jobholding is a function of urbanization and the obvious lack of urbanization in these areas.

Thus, these data indicate that multiple jobholding is a widely dispersed phenomenon, and is not concentrated heavily in what are generally considered the highly industrialized regions of the country. The total rates are remarkably uniform among regions and they vary relatively little from year to year.

TABLE 2—Estimated rate of multiple jobholding for OASDI farm operators, by geographic region, for the conterminous United States, 1957, 1958, and 1959

Region ^(a)	Estimated Rate of Multiple Jobholding		
	1957	1958	1959
	(Percent)		
Northeast	33.7	32.1	32.8
East North Central	28.4	27.0	26.5
West North Central	24.8	23.6	23.6
South Atlantic	32.7	32.6	32.9
East South Central	29.9	31.8	33.1
West South Central	34.9	32.3	32.9
Mountain	35.2	33.4	33.4
Pacific	35.8	33.4	33.8
Average, all Regions	29.6	28.6	28.8

Note: Excludes persons for whom location of farm was not available at time of processing.

(a) The states included in each of the eight regions are listed below:

- | | | | |
|--|---|---|--|
| <p>I. Northeast region</p> <ol style="list-style-type: none"> 1. Maine 2. New Hampshire 3. Vermont 4. Massachusetts 5. Rhode Island 6. Connecticut 7. New York 8. New Jersey 9. Pennsylvania 10. Delaware 11. Maryland | <p>III. West North Central region</p> <ol style="list-style-type: none"> 1. Minnesota 2. Iowa 3. Missouri 4. North Dakota 5. South Dakota 6. Nebraska 7. Kansas | <p>VI. West South Central region</p> <ol style="list-style-type: none"> 1. Arkansas 2. Louisiana 3. Oklahoma 4. Texas | |
| <p>II. East South Central region</p> <ol style="list-style-type: none"> 1. Ohio 2. Indiana 3. Illinois 4. Michigan 5. Wisconsin | <p>IV. South Atlantic region</p> <ol style="list-style-type: none"> 1. Florida 2. Virginia 3. West Virginia 4. North Carolina 5. South Carolina 6. Georgia | <p>VII. Mountain region</p> <ol style="list-style-type: none"> 1. Montana 2. Idaho 3. Wyoming 4. Colorado 5. New Mexico 6. Arizona 7. Utah 8. Nevada | |
| | <p>V. East South Central region</p> <ol style="list-style-type: none"> 1. Kentucky 2. Tennessee 3. Alabama 4. Mississippi | <p>VIII. Pacific region</p> <ol style="list-style-type: none"> 1. Washington 2. Oregon 3. California | |

Multiple Jobholding and Age

While multiple jobholding by farm operators is widespread, it clearly is related to the age of the farm operator. Table 3 shows the rate of multiple jobholding for the three years for the different age groups of farm operators. It shows that more than one-half of the farm operators under 25 years of age were multiple jobholders in all three years. Moreover, despite a modest decline in the overall rate from 1957 to 1958, probably due to the general decline in nonfarm employment in 1958, the multiple jobholding rate for farm operators under 25 years old rose in each year.

The multiple jobholding rate declines in a regular fashion with each increase in the age group, so that for farm operators over 65 the rate is less than one-third of that for farm operators under 25. This is, of course, consistent with the decline in physical capabilities with advancing age and also, perhaps, with the supposition that multiple jobholding is an inverse function of income from farming.

The very high rates of multiple jobholding among younger farm operators has different implications depending upon how multiple jobholding is viewed. If it is viewed as a temporary method of supplementing low farm earnings while getting established in farming, multiple jobholding might be considered a modern step in the old agricultural ladder of farm ownership. If it is viewed as a permanent occupation status, it portends an increasing proportion of farmers will be in this status as the older farm operators retire. If multiple jobholding is viewed as a transition period for persons attempting to leave agriculture, we can expect a continued rapid decline in the number of farm operators if conditions are such to enable them to

TABLE 3—Estimated rate of multiple jobholding for OASDI farm operators, by age, for the conterminous United States, 1957, 1958 and 1959

Age (Years)	Estimated Rate of Multiple Jobholding		
	1957	1958	1959
	(Percent)		
Under 25	52.9	53.9	54.7
25 - 34	37.8	36.4	36.7
35 - 44	37.4	33.9	34.6
45 - 54	32.3	30.3	30.7
55 - 64	25.4	25.4	24.4
65 and over	16.4	15.2	14.1
Average, all age groups	29.6	28.6	28.7

Note: Excludes persons where location of farm was not available and persons not reporting age.

complete their desired exit for other occupations. There is evidence, which will be covered later, suggesting that the latter view is the more accurate one, and that the high rate of multiple jobholding among younger farm operators is a reflection of their attempt to leave agriculture. A second bulletin in this series will be devoted entirely to the occupational mobility from agriculture, using these same Social Security data.

Self-employment Income and Multiple Jobholding

It is generally postulated that multiple jobholding is a function of under-employment in farming and of low income from farming. Although there is an upper limit on the amount of covered earnings to be counted for Social Security purposes, the sample records carry the total net earnings from self-employment regardless of the amount. Thus, the data are limiting only on the lower end of the distribution of self-employment income because of the optional reporting method. This can be overcome by grouping all those with net income from self-employment at some level in excess of the \$1,200 upper limit on income reported under the optional reporting method.

The multiple jobholding rate is shown in Table 4 for farm operators grouped according to their total net income from self-employment. Surprisingly, it does not indicate that multiple jobholding is a function of low income from farming. Indeed, the highest rate of multiple jobholding in each of the three years was found among farm operators whose net earnings from self-employment exceeded \$10,000. The rate of multiple jobholding among farm operators with net earnings

TABLE 4—Estimated rate of multiple jobholding for OASDI farm operators, by net earnings from self-employment, for the conterminous United States

Net Earnings from Self-Employment (Dollars)	Estimated Rate of Multiple Jobholding		
	1957	1958	1959
	(Percent)		
Less than 2,000	29.5	29.1	28.7
2,000 - 3,999	29.1	27.6	27.8
4,000 - 5,999	27.4	26.4	27.7
6,000 - 7,999	30.1	27.4	33.5
8,000 - 9,999	32.7	29.7	28.6
10,000 or more	44.8	35.2	38.4
Average, all operators	29.6	28.6	28.8

Note: Excludes persons where location of farm was not available.

from self-employment of less than \$2,000 was generally about the same or slightly lower than found in the group with higher self-employment earnings.

Thus, multiple jobholding by farm operators is not consistently related to the level of earnings from self-employment. As we shall see later, however, there is a relationship between self-employment income and the type of nonfarm employment.

It is worth noting that during the recession year, 1958, the decline in multiple jobholding rates was concentrated primarily among those farmers with higher earnings from self-employment. There is no evidence that the lower income farm operators tend to be the marginal members of the nonfarm labor force with sharp shifts in their nonfarm employment as a result of cyclical changes in the nonfarm economy. Indeed, these data suggest that the higher income farm operators occupy a more marginal place in the nonfarm economy.

Multiple Jobholding Through Time

Serious problems arise in defining the population for a period of years when dealing with the question of continuity in analyzing these continuous register data. We have been discussing data on the total number of persons classified as farm operators in any given year and the multiple jobholders included in those populations. But some persons enter farming each year and some leave it, either by changing occupation, retirement, or death. So while the continuous register keeps the same people, some who were farmers in the sample in one year are not included as farmers in later years because of changes in occupation, death, or retirement. Others enter the farm operator classification.

Two methods of classification are used to give a picture of the continuity of multiple jobholding by farm operators. First, let us define as a population all of those persons who have appeared in our sample as a multiple jobholding farm operator in one or more years. How many out of this group would be classified as multiple jobholding farm operators in each five years, four years, etc.? Table 5 shows the percentage distribution of the number of years that this population was in the multiple jobholding farm operator category.

Almost one-half of the persons classified as multiple jobholding farm operators in at least one of the 5 years were so classified in only one year. Only 5.6 percent of this group were classified as multiple jobholding farm operators in the 5 consecutive years, 1955 through 1959.

The nature of the population defined in this way tends to reduce the frequency of persons continuously classified as multiple jobholding farm operators. First, persons entering the sample in any year subsequent to 1955 could not, by definition, be multiple jobholders for five years. Persons retiring or dying in the period also would have been excluded from the five-year group. Moreover, those who used multiple jobholding as a method of changing occupations would not be multiple jobholders in each year. Taking all this into account, it still appears that farm operators holding multiple jobs for a span of years are a relatively infrequent occurrence.

The same conclusion is suggested if the population examined for the five years is defined in a much more restrictive fashion. In Table 6, only individuals who were classified as farm operators in every one of the five years 1955-59 is included in the population. Thus, all new entrants and those leaving farming were excluded, as are those who were excluded in one or more years by the income cut-off limits on either self-employment income or wage earnings in excess of the maximum.

Only slightly less than one-half of these farm operators who were

TABLE 5—Proportion of farm operators who were multiple jobholders in years 1955-59, by number of years so classified

Persons Who Were Multiple Job- holding Farm Operators in:	Percent
1 year out of 5	48.1
2 years out of 5	23.7
3 years out of 5	13.7
4 years out of 5	8.9
5 years out of 5	5.6
	100.0

TABLE 6—Proportion of persons who were classified as farm operators in each year, 1955 through 1959, who also were classified as multiple jobholders, by number of years so classified

Farm Operators for 5 Years Who Were Multiple Jobholders in:	Percent
0 years out of 5	57.8
1 year out of 5	14.3
2 years out of 5	8.5
3 years out of 5	6.1
4 years out of 5	4.9
5 years out of 5	8.4

so identified for five years were ever classified as multiple jobholders.⁵ Less than 10 percent of them were multiple jobholding farm operators in 5 consecutive years. In other words, among those who were identified as farm operators in the OASDI data in five consecutive years, only one-fifth of those ever holding multiple jobs did so in every year.

These two sets of data suggest that multiple jobholding by farm operators is not the stable situation that the aggregate annual data suggest. For many persons, it is a step in changing occupations, so that many who are multiple jobholders in a given year are no longer farm operators after a year or two of nonfarm employment experience. For those who stay in farming for five years, continuous multiple jobholding is a relatively infrequent occurrence. Despite the stability of the aggregate data, relatively few farmers are multiple jobholders for as many as five consecutive years. Thus, multiple jobholding does not appear to be a permanent way of life for a very large portion of the commercial farm operators in the United States.

Summary

Among persons classified as farm operators in the OASDI data, the occurrence of multiple jobholding is relatively frequent in any given year, amounting to slightly under one-third of the OASDI farm operators. It is widespread geographically, with little variation in the aggregate rate among geographical regions; except that multiple jobholding is noticeably less frequent in the West North Central states than elsewhere in the conterminous United States.

Multiple jobholding clearly is associated with age, with younger farmers showing very high rates and the rates declining steadily with increasing age. Surprisingly, multiple jobholding does not appear to be a function of the income from self-employment, inasmuch as farmers with higher income from self-employment had a rate of multiple jobholding as high or higher than farmers with lower income from self-employment.

Regardless of the population defined, multiple jobholding by farm operators is not a stable occupational situation for many farm operators. The number of persons in this category for as long as five years is relatively few. Apparently for most farmers it is either a temporary supplement to farm income or a transition from farm to nonfarm employment.

⁵This compares with about 30 percent in any one year (Table 1).

THE NATURE OF OFF-FARM EMPLOYMENT OF FARM OPERATORS

Three types of off-farm employment by farm operators can be identified in the OASDI data. They are nonfarm wage employment, farm wage employment, and nonfarm self-employment. Where the off-farm employment is wage employment it is possible to determine the total wages received in that employment and the wages received in an individual industry. Unfortunately, it is not possible to identify either the nature of or quantity of earnings from nonfarm self-employment because all self-employment earnings are lumped together in the OASDI data. Thus, the kinds of nonfarm self-employment farm operators have and its rewards couldn't be determined in this study.

Table 7 shows the percentage of farm operators who had different kinds of off-farm employment in the years 1957, 1958 and 1959. Some farm operators have more than one kind of off-farm employment in a year; therefore, the sum of the rates of the various types of employment exceed the total rate of multiple jobholding.

The most common off-farm employment is some kind of wage employment. About three-fourths of the farm operators having off-farm employment in any year worked in wage employment, mostly in nonfarm occupations. Less than 10 percent of the farm operators working off their farms worked for other farmers for wages. Almost one-third of the farmers classified as multiple jobholders had some income from nonfarm self-employment.

TABLE 7—Percentage of farm operators with different types of off-farm employment for the conterminous United States, 1957, 1958 and 1959

Kind of Off-farm Employment	Percentage Rate of All Farm Operators		
	1957	1958	1959
All off-farm employment	29.1	28.5	28.7
All off-farm wage employment	21.9	21.3	21.2
Farm wage employment	2.6	2.5	2.7
Nonfarm wage employment	19.4	19.5	19.2
All nonfarm self-employment	9.2	9.0	9.7

Regional Distribution

A breakdown of the type of off-farm employment by geographic region is shown in Table 8. It shows that the rate of nonfarm self-employment varies substantially between geographical areas and accounts for more of the total variation in multiple jobholding rates

than does the variation in the rate of off-farm wage employment. Nonfarm self-employment rates run substantially higher in the Pacific region than elsewhere, and they run substantially lower in the West North Central region. Thus, the modest regional variations noted earlier in total multiple jobholding rates are due largely to variations in rates of nonfarm self-employment. Wage employment, which might be presumed to be closely related to the industrial structure of the area, shows surprising uniformity. In fact, it is highest in those areas generally considered to be less industrialized.

While the total rate of multiple jobholding declined only modestly during the 1958 recession, the rate of off-farm wage employment continued to decline through 1959. The rate of off-farm wage employment was lower in 1959 than in 1957 in the Northeast, East and West North Central, South Atlantic, and West South Central regions. In only two geographic areas did the rate of off-farm wage employment equal or exceed its 1957 level in 1959.

Age and Type of Employment

The occurrence of multiple jobholding among farm operators is a function of age, and the type of off-farm employment also is related to age. The frequency of off-farm wage and nonfarm self-employment for different age groups is shown in Table 9. It shows that off-farm wage employment is a negative function of age, while the frequency of nonfarm self-employment rises until about age 45 and then declines.

TABLE 8—Estimated rate of off-farm wage employment and nonfarm self-employment for OASDI farm operators, by geographic region, for the conterminous United States

Region	Estimated Rate of:					
	Off-farm wage employment			Nonfarm self-employment		
	1957	1958	1959	1957	1958	1959
	(Percent)			(Percent)		
Northeast	23.7	23.2	23.5	12.6	12.3	12.4
East North Central	21.5	20.4	19.5	8.5	8.3	8.8
West North Central	20.0	19.5	18.8	6.2	5.5	6.2
South Atlantic	22.8	23.0	22.5	12.7	12.4	12.7
East South Central	22.7	23.2	24.0	9.6	10.5	11.6
West South Central	25.1	24.1	23.5	12.3	10.3	11.4
Mountain	25.7	26.8	25.7	11.3	9.1	10.9
Pacific	21.4	21.5	22.5	18.1	16.0	15.0
Average, all Regions	22.0	21.6	21.2	9.2	9.0	9.7

Note: Excludes persons for whom location of farm was not available at time of processing.

TABLE 9—Estimated rate of off-farm wage employment and nonfarm self-employment for OASDI farm operators by age, for the conterminous United States

Age (years)	Off-farm wage employment			Estimated Rate of: Nonfarm self-employment		
	1957	1958	1959	1957	1958	1959
	(Percent)			(Percent)		
Under 25	49.4	51.3	51.3	6.5	6.4	6.6
25 - 34	31.6	31.3	31.5	9.2	8.0	8.8
35 - 44	29.1	26.2	26.4	10.5	10.2	10.7
45 - 54	23.4	22.5	22.0	11.3	9.7	11.1
55 - 64	17.6	18.0	16.5	9.5	9.3	9.4
65 and over	9.7	8.9	7.2	7.6	7.2	7.6
Average, all age groups	22.0	21.6	21.2	9.2	9.0	9.7

Note: Excludes persons for whom location of farm was not available at time of processing and persons not reporting age.

Neither of these findings is unexpected. Off-farm wage employment while operating a farm is likely to be physically demanding and as a result would decline with advancing age. Off-farm self-employment is likely to involve capital and/or management experience, both of which might be expected to increase with age, at least for some years.

In looking at off-farm wage employment over the three years covered by these data, it should be noted that the decline in off-farm wage employment rates that occurred in 1958 was concentrated entirely in age groups over 35. By 1959, the rate of off-farm wage employment of farm operators for each age group over 35 was lower than in 1957, whereas the rate for younger farm operators was as high or higher than it had been in 1957. This suggests that the nonfarm labor market has been less favorable for older farm operators, who are likely to have less education and/or training in nonfarm vocations.

Much of the cyclical variation in multiple jobholding rates appears to result from variations in the rate of off-farm self-employment. This is especially true for older farm operators. Thus, to the extent that it can be determined from this limited experience, both wage employment and nonfarm self-employment of older farm operators appear to be sensitive to cyclical movements in the nonfarm economy.

Net Income from Self-employment and Type of Employment

It has been pointed out that it is impossible to differentiate between net earnings from farm self-employment and net earnings from nonfarm self-employment in the OASDI data. Thus, there are some problems in classifying types of employment by levels of net earnings from self-

employment. Nevertheless, such a classification is attempted in Table 10.

TABLE 10—Estimated rate of off-farm wage employment for OASDI farm operators by net earnings from self-employment, for the conterminous United States

Net Earnings From Self-Employment (Dollars)	Off-farm wage employment			Estimated Rate of: Nonfarm self-employment		
	1957	1958	1959	1957	1958	1959
	(Percent)			(Percent)		
Less than 2,000	24.5	24.5	23.9	6.8	6.3	6.5
2,000 - 3,999	19.8	19.2	18.6	11.6	10.8	11.7
4,000 - 5,999	13.1	16.3	14.2	16.1	12.6	15.9
6,000 - 7,999	14.7	12.9	14.6	18.9	16.4	22.3
8,000 - 9,999	12.1	13.9	11.2	23.9	18.8	19.3
10,000 or more	13.2	12.2	15.1	34.8	26.8	29.8
Average, all operators	22.0	21.6	21.2	9.2	9.0	9.7

Note: Excludes persons for whom location of farm was not available at time of processing and persons not reporting net earnings from self-employment.

The firmest conclusion that can be obtained is that the rate of off-farm wage employment is an inverse function of the level of self-employment income. The rate of off-farm wage employment for those with self-employment incomes of less than \$2,000 was appreciably higher than for other self-employment income groups. Starting at about the \$4,000 level of self-employment income, the relationship between income from self-employment and rate of wage employment seems to level off and remain stable. The strong positive association between rate of nonfarm self-employment and income from self-employment is not unexpected. After all, if the nonfarm self-employment is remunerative, then total self-employment income should be related to its frequency. It is worth noting that one-fourth of all farmers with self-employment earnings in excess of \$10,000 had self-employment income from nonfarm as well as farm sources. Clearly, further investigation of this phenomenon, using other data, is warranted.

Thus, we see that expectations regarding the relationship between off-farm wage work and farm income are fulfilled, in that lower income farmers do tend to have off-farm wage employment more often. This is consistent with the belief that many low-income farmers suffer from under-employment of their labor in their farm operation which enables them to participate more frequently in off-farm wage jobs which make fixed demands upon their time.

Employment Status and Continuity of Multiple Jobholding

To examine the relationship between continuity of multiple jobholding and type of employment, let us return to our sample of individuals who were farm operators for each of the five years 1955 through 1959. Tables 11 and 12 give two views of that group in relation to their employment status in 1959.

TABLE 11—Employment status in 1959 of farm operators who were multiple jobholders in one or more years, 1955 - 1959

Employment Status in 1959	Number of Years of Multiple Jobholding, 1955-59				
	5	4	3	2	1
	(Percent)				
Farming only	0	29.1	48.2	65.5	80.4
Farming and wage job only	64.3	57.7	43.3	28.6	15.2
Farming and nonfarm self-employment	35.7	13.2	8.4	5.9	4.4
	100.0	100.0	100.0	100.0	100.0

TABLE 12—Distribution of multiple jobholders in years 1955 - 1959, by years of multiple jobholding and employment status in 1959

Employment Status in 1959	Years of Multiple Jobholding					Total
	5	4	3	2	1	
	(Percent)					
Wage job only	34.9	18.2	17.2	15.7	14.0	100.0
Nonfarm self-employment	56.8	12.2	9.8	9.4	11.8	100.0

About 80 percent of the group which had been multiple jobholders in only one year out of the five were not multiple jobholders in 1959. Among those with only one out of the five years as multiple jobholders, the ratio of wage employment to nonfarm self-employment was slightly over three to one. For those who were multiple jobholders in 3 of the 5 years, the ratio holding wage jobs in 1959 to those who had nonfarm self-employment was more than five to one. However, among those who were multiple jobholders in every year, the ratio of wage employment to nonfarm self-employment was less than two to one.

This illustrates that of all those who were farmers in each of the five years and multiple jobholders in at least one of the five years, the proportion of intermittent jobholders is highest among those holding off-farm wage employment. While the occurrence of off-farm wage employment is much higher in any one year, the probability of continuous wage employment for as long as five years is lower than the probability of continuous nonfarm self-employment.

The same conclusion is obtained from the data in Table 12. It shows the proportion of persons in the two employment categories according to the number of years as a multiple jobholder. More than one-half of the farm operators who had nonfarm self-employment income in 1959 had been multiple jobholders for five consecutive years, as compared to about one-third of those who had off-farm wage earnings in 1959.

Thus, indications are that continuity as a multiple jobholder is less frequent among farm operators who work off their farm in some kind of wage employment. Although its frequency is less at any one time, nonfarm self-employment seems to be a more continuous situation for farmers so employed. Unfortunately, the OASDI data contain only limited information regarding nonfarm self-employment, so that it is impossible to determine from these data either the nature of or the earnings from nonfarm self-employment for those farmers reporting farm self-employment in the same year.

THE INDUSTRY OF WAGE EMPLOYMENT OF FARM OPERATORS

Two sources of information are available in the OASDI data for those individuals who have wage employment. The individual's Continuous Work-History File records employment status, covered earnings and other individual data. For all those who have off-farm wage employment there is an individual employee-employer card for each wage job held by the individual. Among other things, it contains information on the type and location of the industry of wage employment.

Since an individual farm operator can work for more than one employer during the year, and the employers may be in different industries, it is necessary to deal with off-farm wage employment in terms of employers rather than employees in order to avoid multiple counts and tabulations.

Table 13 shows the distribution of wage jobs held by farm operators by industry for the years 1957 through 1959. The most frequent employment of farm operators who work off their farm for wages was by some unit of government, which accounted for more than one-fourth of all off-farm wage jobs. This category would run the gamut of government units and types of jobs, including employment by township and county units of government, by federal agencies administering farm programs, etc. Even this understates actual employment by government because workers in school systems, hospitals, and health

services are classified in the service division. The second most frequent industry of employment was in wholesale and retail trade, which accounted for about one-sixth of the wage jobs held by farm operators. Manufacturing was the third most frequent source, followed by employment in agriculture, forestry, and fisheries.

TABLE 13—Industry division of employment of farm operators holding wage jobs, conterminous United States, 1957, 1958 and 1959

	Percentage Distribution		
	1957	1958	1959
Agriculture, forestry and fishing	10.8	11.8	11.7
Mining	2.0	2.1	2.5
Contract construction	10.0	10.6	9.9
Manufacturing	15.6	13.6	14.7
Public utilities	4.6	3.4	3.8
Wholesale and retail trade	17.9	17.8	17.8
Finance, insurance and real estate	1.4	1.7	1.8
Services	7.0	7.7	9.2
Government not classified elsewhere	29.1	29.6	27.3
Miscellaneous ^(a)	1.6	1.6	1.3
Total	100.0	100.0	100.0

^(a)Includes nonclassifiable and unclassified jobs.

Source: Employee-Employer cards for the respective years.

The pattern of off-farm wage employment over the three years showed significant variations among the industries. Manufacturing and public utilities showed a strong cyclical reaction to the 1958 recession, whereas employment in government, agriculture, contract construction, and wholesale and retail trade was not noticeably affected by the recession. The percentage of employment in finance, insurance, and real estate, and in service industries, showed increases in each year just as the national employment did. Employment of farm operators in mining industries increased during the three years, contrary to the steady downward trend in total employment in the industry.

Thus, farm operators with off-farm wage employment are not heavily concentrated in industries experiencing a decline in the labor force as some have hypothesized. Neither are they heavily concentrated in industries which experience large cyclical fluctuations in employment. It has been suggested that farm people entering the nonfarm labor market tend to have access primarily to that portion of the labor market subject to instability and possible contraction. It does not appear to be true for these multiple-jobholding farm operators. Indeed, the distribution of their industry of employment in wage jobs compares quite favorably with the total for all workers, although farm operators do have a higher incidence of employment in agricul-

ture, forestry, and fisheries than does the labor force in general. There are, however, substantial variations in regional distributions of wage jobs, and in the distribution by age, race, and income.

Regional Distribution

There are major regional differences in the distribution of wage jobs by industry (Table 14). Generally, these differences are found in the distribution for all three years rather than in a single year. In addition, there were some regional variations in the pattern of year-to-year change in the industry distribution of wage employment.

In the Northeast region, the distribution of off-farm wage jobs was marked by a higher than average portion in manufacturing employment and in service industries. The proportion employed in agriculture and in wholesale and retail trade was lower than in other regions.

The East North Central region was marked by the lowest proportion of farm operators working in agriculture, forestry, and fishing industries of any of the regions. It had the highest proportion working in manufacturing industries, almost one-fourth, and also had a higher than average proportion working in wholesale and retail trade.

The West North Central region had a lower proportion of farm operators holding wage jobs in manufacturing than the average, although it was not as low a proportion as found in the West South Central region. The proportion of off-farm wage employment of farm operators in wholesale and retail trade was higher in the West North Central region than in any other region. The proportion employed in government also was above the average level.

In the South Atlantic region, government employment accounted for about one-third of all off-farm wage jobs held by farm operators. Employment in wholesale and retail trade also was high, and the two—government and trade—accounted for about half of the total off-farm wage employment in the region. Employment patterns in the East South Central region were similar to those in the South Atlantic region except that the proportion employed as wage workers in agriculture, forestry and fisheries was higher and that in wholesale and retail trade was lower.

The off-farm employment pattern in the West South Central region differed sharply from that in other regions. Almost one-fifth of the farm operators working off their farm for wages worked in agriculture,

TABLE 14—Percentage distribution of wage jobs held by OASDI farm operators in 1957, 1958 and 1959, by industry division of employment, for eight geographic regions

	North East 1957 1958 1959		East North Central 1957 1958 1959		West North Central 1957 1958 1959		South Atlantic 1957 1958 1959		East South Central 1957 1958 1959		West South Central 1957 1958 1959		Mountain 1957 1958 1959		Pacific 1957 1958 1959									
Agriculture, forestry and fishing	9.0	7.4	6.8	5.1	6.1	6.8	9.1	10.3	10.2	7.0	8.5	8.6	12.8	13.2	12.4	14.6	13.2	13.2	27.5	36.1	24.9			
Mining	1.4	0.5	1.0	1.9	1.7	2.9	2.9	1.9	2.4	1.6	0.8	0.5	2.0	1.6	1.5	—	6.0	7.7	10.7	11.1	9.3	0.3	.0	0.5
Contract construction	8.8	7.4	4.4	8.4	11.3	12.3	10.3	11.5	10.5	7.9	8.2	8.2	9.3	8.0	8.8	15.2	14.2	10.4	3.6	2.8	1.4	12.4	9.1	11.0
Manufacturing	21.2	17.9	19.2	25.1	21.9	23.3	11.3	10.3	9.9	14.8	13.3	15.3	12.4	12.4	14.4	7.5	7.7	8.4	16.8	12.9	14.6	14.7	14.0	15.5
Public utilities	3.8	5.3	4.1	5.4	3.6	4.0	6.0	4.1	4.8	3.4	2.2	2.4	2.6	2.6	3.5	2.3	2.9	2.1	3.0	3.0	3.7	5.0	2.5	4.6
Wholesale and retail trade	14.4	13.2	11.7	17.9	18.3	18.9	20.2	19.8	19.1	19.1	19.3	21.0	14.8	18.4	17.0	15.8	15.7	16.4	17.3	17.0	16.0	17.9	13.7	18.2
Finance, insurance and real estate	1.1	0.8	2.2	1.6	1.0	1.3	1.0	1.4	1.3	1.3	2.0	2.9	3.3	3.2	2.2	1.5	2.1	2.5	1.1	1.3	0.8	1.5	2.8	2.1
Services	9.7	11.3	14.1	5.8	6.3	6.0	6.7	6.9	9.7	8.4	8.7	8.2	5.9	6.2	8.9	7.1	8.2	8.3	7.7	9.9	11.0	7.4	9.5	12.9
Government not classified elsewhere	29.2	35.3	35.7	26.8	27.4	23.1	31.5	32.4	30.7	34.2	34.3	31.9	36.0	33.7	30.5	28.9	24.3	23.1	23.6	28.6	29.2	12.1	10.9	8.3
Miscellaneous ^(a)	1.4	1.1	1.0	2.0	2.4	1.3	1.0	1.5	1.4	2.3	2.5	1.0	0.9	0.8	0.9	2.3	1.9	1.7	1.6	0.3	0.8	1.2	1.4	1.9

^(a) Includes nonclassifiable and unclassified jobs.
Source: Ibid.

forestry, and fishing industries. The proportion working in manufacturing was the lowest of any of the eight regions, and the proportion working in mining was the highest.⁶ Contract construction also was proportionately higher in this region than elsewhere.

Employment patterns of farm operators in the Mountain region were surprisingly close to the average national pattern, in view of the usual notion of the employment patterns in that region. It is usually believed that this region is heavily dependent upon its natural resources and agriculture and that employment in these industries is relatively higher in this region than in others. This, however, was not the case insofar as the off-farm wage employment of farm operators was concerned.

The Pacific region was marked by an extraordinarily high proportion of farm operators employed in agriculture, forestry, and fisheries, and a very low proportion employed in government. Moreover, there was a sharp decline over the three years in the proportion employed in government that was largely offset by a steady rise in the proportion of farm operators holding wage employment in service industries.

By and large, these regional variations in the industry of employment of these farm operators is consistent with the total regional variations in employment. Thus, the concentration of manufacturing in the Northeast and East North Central regions makes the total employment in manufacturing high in those regions. Conversely, the absence of manufacturing in the West North Central, West South Central, and Mountain regions is obvious in the total employment statistics as well as in these for farm operators. In general, the regional variations that appear in the data for farm operators are largely due to the differences in the regional economic structure, not in the characteristics of the farm operators.

In general, the regional data are consistent from year to year in the pattern of regional differences in industry of off-farm wage employment. They show, as did the aggregate data, the cyclical change in manufacturing employment that occurred in the 1958 recession. There has been a general expansion of wage employment of farm operators in the service industries in all regions, much as indicated in the national statistics. It is interesting to note that in the South, where off-farm employment is needed to alleviate under-employment in agriculture, the proportion of OASDI farm operators employed in industries that

⁶The data for 1957 appear to have some errors in classification or tabulation in this region, especially in mining.

have been declining relatively as a source of employment—agriculture and manufacturing—is lower than in other regions of the country.

Age and Off-farm Wage Employment

The distribution of off-farm wage employment by industry for six age groups is shown in Table 15. It illustrates that there is a strong and consistent relationship between the age of the farm operator and his industry of off-farm wage employment.

Younger farmers with off-farm wage employment were heavily concentrated in manufacturing, wholesale and retail trade, and public utilities, relative to the total employment in these industries. Conversely, older farm operators were more heavily concentrated in government, services, and finance, insurance and real estate. About 40 percent of all farm operators over 65 who had off-farm wage jobs worked for some unit of government. The construction industry had a relatively higher proportion of men over 25 and under 65 in it, while those who worked for wages in agriculture, forestry, and fisheries were more heavily concentrated among the youngest and oldest groups.

Comment has already been made regarding the cyclical aspects of the employment in manufacturing which appear in the data, presumably as a result of the 1958 recession. It is interesting to note that much of the shift that occurred in manufacturing employment of farm operators appears to have occurred in the youngest and oldest age groups. This is consistent with expectations, inasmuch as the youngest age group is very likely to have the least seniority, and probably the fewest work-acquired skills. Older workers may have more seniority, but having reached 65, their physical capabilities may have tended to make them marginal workers in manufacturing industries.

Surprisingly, the older farm operators tend to have their employment more heavily concentrated in what are generally considered the expanding industries, i.e., government, services, and trade, while the younger farm operators tend to have their wage employment more heavily concentrated in industries where the labor force is growing slowly, if at all. If, as hypothesized earlier, farm operators often use multiple jobholding as a step in leaving farming, many of the younger ones may be leaving one industry with a declining labor force, agriculture, only to enter another.

Self-employment Income and Industry of Employment

Table 16 shows the relationship between the level of self-employment income of the farm operator and the industry of employment in his wage job.

Surprisingly, no regular relationship is shown between self-employment income of farmers and frequency of employment as a wage worker in agriculture, forestry, and fisheries. Low-income farmers apparently are not the only ones who work for other farmers for wages.

TABLE 16—Percentage distribution of wage jobs held by 1957 OASDI farm operators in 1957, by industry and net earnings from self-employment, for the conterminous United States

Industry	Net Earnings From Self-Employment (Dollars)			
	Less than 2,000	2,000- 3,999	4,000- 5,999	6,000 or more
	(Percent)			
Agriculture, forestry and fishing	11.4	9.0	8.9	11.4
Mining	2.2	1.5	0.5	0.6
Contract construction	11.4	7.9	2.3	3.0
Manufacturing	17.5	12.7	6.6	4.8
Public utilities	4.4	5.2	4.2	4.8
Wholesale and retail trade	18.2	16.5	19.2	17.4
Finance, insurance and real estate	1.4	1.5	1.9	2.4
Services	7.5	5.3	5.2	7.8
Government not classified elsewhere	24.3	39.4	50.3	46.6
Miscellaneous ^(a)	1.7	1.0	0.9	1.2
Total	100.0	100.0	100.0	100.0

^(a)Includes nonclassifiable and unclassified jobs.

Note: Estimated from sample data.

Source: 1937-58 Continuous Work-History Sample and 1957 Annual Employee-Employer Wage Card File.

Wage employment in mining, contract construction, and manufacturing industries tended to be inversely related to net income from self-employment. As self-employment income rises, the frequency of wage employment in these industries falls markedly. Conversely, the frequency of wage employment in government and finance, insurance, and real estate appears to be positively related to income from self-employment. There was no relationship between frequency of wage employment in the wholesale and retail trade and level of income from self-employment.

The fact that the lowest and highest of the self-employment income groups are more frequently involved in both agriculture and service industries than are the middle income groups suggests that

the nature of the employment may well be different for farmers with low self-employment income and those with a high self-employment income. The data, however, only provide information on the industry of employment and not upon the occupation in which the individual was employed.

Race, Sex and Industry of Off-farm Wage Employment

Table 17 shows the pattern of industry of employment of farm operators having off-farm wage employment in the three years 1957, 1958, and 1959, according to race and sex. Some care should be exercised in the interpretation of these statistics because the number of Negroes and the number of females in the OASDI sample is small.⁷ Although the smaller numbers make generalizations regarding year-to-year change difficult, several overall observations regarding the industry of wage employment seem feasible.

TABLE 17—Percentage distribution of wage jobs held by OASDI farm operators in 1957, 1958 and 1959, by industry, race and sex, for the conterminous United States

Industry Division.	Race						Sex					
	Non-Negro			Negro			Male			Female		
	1957	1958	1959	1957	1958	1959	1957	1958	1959	1957	1958	1959
Agriculture, forestry and fishing	10.5	11.6	11.4	32.9	32.8	34.7	10.9	12.0	11.8	5.4	6.1	7.7
Mining	2.0	2.1	2.5	—	—	—	2.0	2.2	2.6	0.5	.0	.0
Contract construction	9.8	10.6	9.9	22.4	17.9	6.9	10.2	10.9	10.1	4.3	2.5	2.7
Manufacturing	15.6	13.6	14.6	15.8	17.9	20.8	15.6	13.6	14.9	15.7	13.7	8.2
Public utilities	4.6	3.4	3.9	—	1.5	—	4.7	3.5	3.9	1.1	1.0	0.5
Wholesale and retail trade	18.0	17.9	17.9	9.2	9.0	16.7	17.7	17.5	17.5	23.2	27.4	28.4
Finance, insurance and real estate	1.4	1.7	1.8	1.3	—	—	1.4	1.6	1.6	3.8	3.6	5.5
Services	6.9	7.7	9.1	11.8	13.4	12.5	6.0	6.7	8.3	36.9	36.5	35.5
Government not classified elsewhere	29.6	29.9	27.6	5.3	7.5	8.3	29.9	30.4	27.9	8.6	9.1	10.9
Miscellaneous ^(a)	1.6	1.7	1.3	1.3	.0	.0	1.6	1.7	1.3	0.5	.0	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^(a)Includes nonclassifiable and unclassified jobs.

Among Negro farm operators working off their farms, the proportion working in agriculture is much higher than for non-Negroes. This also appears to be true for manufacturing and service industries. The proportion of Negroes working in government, public utilities, and finance, insurance and real estate industries is much lower than

⁷The Bureau of Old Age and Survivors Disability Insurance (BOASDI) data classifies race as Negro and non-Negro only.

among non-Negro farm operators. The unstable nature of the data from year to year in the construction and trade industries makes generalization impossible.

It is not surprising to find a lower proportion of female farm operators than males engaged in agriculture, mining, construction and public utilities industries. These are industries often involving heavy physical effort. It was somewhat surprising, however, to find female farm operators so infrequently employed by government.

The proportion of female farm operators employed in wholesale and retail trade, service, and finance, insurance and real estate industries is much higher than found among male farm operators.

Summary

The personal characteristics of the farm operator appear to be closely related to the industry of nonfarm employment, or conversely, the industry and the employment may often tend to attract farm operators with particular characteristics.

Employment in government, which is the single most frequent type of employment held by OASDI farm operators, is heavily concentrated among older, white, male, higher-income farm operators. Employment in manufacturing, mining, and construction is heavily concentrated among young, lower-income males. Employment in service industries seems less selective, while employment in wholesale and retail trade seems to attract younger persons but is not associated with net income from self-employment. Actually, many of these associations will become more understandable as we examine the rewards of off-farm wage employment, which will also give some indications as to the extent (part- or full-time) of employment.

THE REWARDS FROM OFF-FARM EMPLOYMENT

The data on earnings from farm and nonfarm self-employment are not tabulated separately in the OASDI data. Wage data are tabulated first and separately, so that the wages received by a farm operator working off his farm can be determined. Thus, the discussion of earnings which follows is based only upon the wage jobs held by farm operators and does not include their nonfarm self-employment income, if any.

The distribution of wage earnings of OASDI farm operators who held off-farm wage jobs in 1957, 1958 and 1959 is shown in Table 18. It shows that in each of the three years, about one-third of the farm operators with off-farm wage jobs had earnings in their off-farm employment of less than \$200 per year. Over half of them had earnings of less than \$600 per year in each of the years. In fact, the median earnings in the wage jobs were between \$505 and \$540 in each of the three years.

Only about one-third of the OASDI farm operators working for wages off their farm in any year received more than \$1,000 from their off-farm employment. In 1957, only 7.0 percent received more than \$3,000 in wages from off-farm employment. This percentage rose to 9.1 percent in 1958 and in 1959 it was 11.2 percent. The increase from 1958 to 1959 was due in part to an increase in the upper limit on coverage.

Apart from this continuing rise in the percentage of farm operators earning more than \$3,000 in off-farm wages annually, there was a re-

TABLE 18—OASDI farm operators with off-farm wage employment in 1957, 1958, and 1959, by taxable wage earnings for the conterminous United States

Off-Farm Wage Earnings (Dollars)	Percentage		
	1957	1958	1959
Less than 200	30.6	31.2	30.7
200 - 399	13.7	13.5	12.3
400 - 599	9.5	9.5	9.8
600 - 799	6.5	6.5	7.2
800 - 999	6.3	5.5	5.5
1,000 - 1,499	10.1	9.6	9.3
1,500 - 1,999	6.3	6.1	5.9
2,000 - 2,499	5.1	5.1	4.4
2,500 - 2,999	3.9	3.8	3.7
3,000 - 3,499	3.6	3.9	3.7
3,500 - 4,000	2.9	3.6	3.0
4,000 or more	1.5	1.6	4.5
Total	100.0	100.0	100.0
Median (\$)	518	505	540
Average (\$)	951	966	1,038

markable year-to-year stability in the distribution of wage earnings. It appears that the rise in the percentage receiving over \$3,000 annually in wages was the result of a slight decrease in the proportion getting

from \$1,000 to \$3,000 annually in off-farm wages. There were no appreciable year-to-year changes in the percentage of farm operators getting less than \$600 or less than \$200 annually in off-farm wages.

The distribution of off-farm wage earnings of farm operators makes it obvious that much of the off-farm wage employment is of a part-time or intermittent nature or is at a very low wage. This is the only explanation of the high proportion of persons with very low wage earnings. These low earnings also are consistent with the high proportion of off-farm wage employment on an irregular basis. Much of the off-farm wage employment appears to be an income supplement or incidental matter for many farm operators in a given year rather than a permanent way of making a living.

Regional Distribution

Tables 19a, b, and c show the regional distribution of wage earnings of farm operators for the three years. In each of the three years, farm operators in the Pacific region had the highest median and the highest average wage earnings. The income level from off-farm wage employment was next highest in the East North Central and Northeast regions, respectively, with the Mountain region next in two of the

TABLE 19a—Percentage distribution of 1957 OASDI farm operators for whom off-farm wage earnings were reported in 1957, by amount of off-farm wage earnings, for eight regions and the conterminous United States

Off-Farm Wage Earnings in 1957 (Dollars)	North East	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	All Regions
	(Percent)								
1 - 199	26.7	27.7	34.0	33.1	35.2	32.9	26.3	21.5	30.6
200 - 399	14.0	13.5	14.3	14.3	13.8	13.3	14.4	8.9	13.7
400 - 599	9.1	8.8	10.5	10.6	9.1	8.4	8.5	10.1	9.5
600 - 799	5.4	6.8	6.3	6.4	8.4	7.1	5.9	5.1	6.5
800 - 999	8.0	5.9	6.9	5.5	3.7	6.0	6.3	8.4	6.3
1,000 - 1,499	11.8	10.2	9.1	7.5	7.9	13.1	15.2	9.3	10.1
1,500 - 1,999	7.5	7.3	5.1	5.1	5.7	5.6	7.4	9.3	6.3
2,000 - 2,499	3.8	5.6	4.6	4.4	5.9	5.8	4.1	6.3	5.1
2,500 - 2,999	4.0	4.5	3.1	4.4	4.4	2.8	3.7	6.3	3.9
3,000 - 3,499	5.1	4.2	2.8	2.9	2.7	2.4	4.1	7.2	3.6
3,500 - 3,999	2.4	3.6	2.3	4.0	2.2	1.7	2.2	5.1	2.9
4,000 or more	2.2	1.9	1.0	1.8	1.0	0.9	1.9	2.5	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median (\$)	610	606	434	446	424	490	625	905	518
Average (\$)	1,034	1,057	834	924	872	848	1,000	1,322	951

TABLE 19b—Percentage distribution of 1958 OASDI farm operators for whom off-farm wage earnings were reported in 1958, by amount of off-farm wage earnings, for eight regions and the conterminous United States

Off-Farm Wage Earnings in 1958 (Dollars)	North East	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	All Regions
	(Percent)								
1 - 199	26.9	29.2	36.7	30.2	32.4	28.3	29.6	23.3	31.2
200 - 399	12.5	12.9	12.4	15.4	16.7	17.0	9.0	10.8	13.5
400 - 599	9.1	8.6	10.2	11.6	9.0	8.3	11.9	7.2	9.5
600 - 799	7.2	6.2	7.2	5.5	6.5	5.4	6.1	8.1	6.5
800 - 999	4.4	6.2	5.4	4.2	5.6	5.2	6.5	7.2	5.5
1,000 - 1,499	10.3	9.9	8.0	9.5	8.2	10.4	13.7	11.7	9.6
1,500 - 1,999	7.8	5.9	5.6	6.3	5.3	5.4	7.2	9.0	6.1
2,000 - 2,499	5.9	5.7	3.9	5.9	4.1	6.8	4.7	4.9	5.1
2,500 - 2,999	4.4	5.0	3.3	2.5	3.1	4.4	3.6	4.0	3.8
3,000 - 3,499	4.7	4.4	3.1	3.2	4.8	4.1	2.9	5.4	3.9
3,500 - 3,999	5.3	3.9	3.0	3.6	2.4	3.7	4.0	4.9	3.6
4,000 or more	1.6	2.2	1.3	1.9	1.7	1.1	0.7	3.6	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median (\$)	638	578	414	470	414	508	586	814	505
Average (\$)	1,107	1,056	845	946	893	988	972	1,218	966

TABLE 19c—Percentage distribution of 1959 OASDI farm operators for whom off-farm wage earnings were reported in 1959, by amount of off-farm wage earnings, for eight regions and the conterminous United States

Off-Farm Wage Earnings in 1959 (Dollars)	North East	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	All Regions
	(Percent)								
1 - 199	26.6	28.7	34.4	31.9	33.3	31.2	28.0	19.7	30.7
200 - 399	9.9	11.6	12.5	13.7	14.8	13.8	11.3	7.9	12.3
400 - 599	7.9	8.6	10.5	11.2	11.5	10.0	6.9	9.1	9.8
600 - 799	6.8	6.6	7.9	6.6	6.8	7.7	7.6	6.7	7.2
800 - 999	5.4	4.6	6.0	5.9	5.4	5.2	4.4	7.9	5.5
1,000 - 1,499	11.3	8.7	9.1	8.9	8.1	9.2	11.6	9.8	9.3
1,500 - 1,999	9.3	6.1	4.9	6.6	3.7	5.7	8.4	6.3	5.9
2,000 - 2,499	5.4	4.8	3.8	3.8	2.6	4.6	6.2	7.1	4.4
2,500 - 2,999	4.2	5.3	3.2	2.3	3.9	2.9	3.3	3.5	3.7
3,000 - 3,499	4.8	4.4	2.3	3.2	4.6	3.1	4.7	6.3	3.7
3,500 - 3,999	3.4	4.4	2.6	1.9	2.2	2.5	3.3	4.7	3.0
4,000 or more	5.1	6.0	2.9	4.0	3.1	4.2	4.4	11.0	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median (\$)	762	627	455	472	427	495	695	965	540
Average (\$)	1,201	1,219	867	923	896	959	1,136	1,538	1,038

three years. The median income level was lowest in each year in the East South Central region; but the average income level was lowest every year in the West North Central region, indicating relatively few persons in that region with high off-farm wage earnings. These median levels of off-farm wages are consistent with the region variations in levels of income and earnings of the entire population in the United States.

The reason for the higher income level from wage employment in the Pacific region was the much lower proportion of farm operators with off-farm wage earnings of less than \$400 annually and the much higher proportion with wage earnings in excess of \$3,000 annually. Whereas the national average showed about 43 percent of all farm operators with wage earnings less than \$400 in 1959, less than 28 percent of the farm operators in the Pacific region were in this low-earnings group. In 1959, when 11.2 percent of all OASDI farm operators had wage earnings over \$3,000, in the Pacific region 22 percent had more than \$3,000 in off-farm wage earnings.

In general, the regional distribution of wage earnings can be summarized as follows: The proportion of farm operators in the lower brackets of wage earnings (under \$400) was modestly lower in the Northeast, East North Central, and Mountain regions and markedly lower in the Pacific region. From the \$1,000 annual wage earnings group on up the percentage in each of these groups was slightly higher in the Northeast, East North Central, and Mountain regions and substantially higher in the Pacific region. Thus, if one classified the regions in terms of the proportion that farmers are of the total population, the lower the proportion of farmers, the higher the average wage earnings of farmers who work off the farm for wages. To put it another way, the greater the industrialization in a region, the higher is the average level of income from off-farm wage work. In the less industrialized regions farm operators working off their farm for wages appear to have a higher proportion of intermittent or part-time employment. These regions also probably have a lower wage level for those whose off-farm employment is on a regular or full-time basis.

Age and Earnings from Nonfarm Wage Employment

The distribution of off-farm wage earnings by age of farm operators is shown for the three years 1957-59 in Tables 20a, b, and c. The median level of wage earnings rises sharply from that of the group under 25 to those who were 25-34 and then declines somewhat for

TABLE 20a—Percentage distribution of 1957 OASDI farm operators for whom off-farm wage earnings were reported in 1957, by amount of off-farm wage earnings and age, for the conterminous United States

Off-Farm Wage Earnings in 1957 (Dollars)	Under 25	25-34	35-44	45-54	55-64	65 & Over	All Ages
	(Percent)						
1 - 199	29.4	26.5	30.4	32.0	32.7	32.4	30.6
200 - 399	15.9	14.1	12.2	12.2	14.4	18.2	13.7
400 - 599	9.6	10.0	9.5	8.3	8.8	13.5	9.5
600 - 799	9.2	6.2	5.9	6.9	6.5	6.8	6.5
800 - 999	7.2	8.4	5.8	6.3	5.6	4.7	6.3
1,000 - 1,499	12.7	9.9	10.3	11.1	9.4	7.0	10.1
1,500 - 1,999	4.8	6.8	7.5	6.1	5.8	4.2	6.3
2,000 - 2,499	3.2	5.2	5.4	5.5	4.2	5.7	5.1
2,500 - 2,999	2.0	5.2	4.7	2.9	4.6	1.8	3.9
3,000 - 3,499	2.4	3.4	3.5	3.8	4.1	3.1	3.6
3,500 - 3,999	3.2	2.4	3.3	3.5	2.4	1.3	2.9
4,000 or more	0.4	1.9	1.5	1.4	1.5	1.3	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median \$	496	587	554	541	464	393	518
Average \$	837	1,007	1,005	968	922	771	951

Note: Estimated from sample data. Not adjusted to account for persons for whom amount of wage earnings was not reported in 1957.

TABLE 20b—Percentage distribution of 1958 OASDI farm operators for whom off-farm wage earnings were reported in 1958, by amount of off-farm wage earnings and age, for the conterminous United States

Off-Farm Wage Earnings in 1958 (Dollars)	Under 25	25-34	35-44	45-54	55-64	65 & Over	All Ages
	(Percent)						
1 - 199	36.3	30.3	30.8	30.7	29.6	38.9	31.2
200 - 399	12.7	12.5	13.4	12.7	15.4	15.2	13.5
400 - 599	13.4	10.6	9.4	8.9	8.6	8.6	9.5
600 - 799	8.6	6.4	5.8	6.6	6.6	6.6	6.5
800 - 999	6.5	4.9	5.9	5.8	5.8	2.9	5.5
1,000 - 1,499	8.2	11.4	9.4	9.7	9.1	7.0	9.6
1,500 - 1,999	4.5	6.4	6.5	5.7	7.2	3.3	6.1
2,000 - 2,499	3.4	4.3	6.0	6.2	4.0	5.3	5.1
2,500 - 2,999	2.4	3.9	3.5	4.2	3.9	4.1	3.8
3,000 - 3,499	3.1	4.1	4.5	2.7	4.4	4.5	3.9
3,500 - 3,999	0.7	3.6	3.6	4.3	3.9	2.9	3.6
4,000 or more	0.3	1.6	1.3	2.6	1.5	0.8	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median \$	410	531	522	543	512	330	505
Average \$	709	983	987	1,014	983	837	965

Note: Estimated from sample data. Not adjusted to account for persons for whom amount of wage earnings was not reported in 1958.

TABLE 20c—Percentage distribution of 1959 OASDI farm operators for whom off-farm wage earnings were reported in 1959, by amount of off-farm wage earnings and age, for the conterminous United States

Off-Farm Wage Earnings in 1959 (Dollars)	Under 25	25-34	35-44	45-54	55-64	65 & Over	All Ages
	(Percent)						
1 - 199	36.9	25.6	30.3	31.7	30.0	39.6	30.7
200 - 399	12.2	12.2	12.3	12.6	11.3	15.0	12.3
400 - 599	13.8	9.0	9.1	10.6	9.0	8.4	9.8
600 - 799	6.1	11.3	6.0	6.4	6.3	6.6	7.2
800 - 999	4.8	6.9	5.2	4.4	6.6	4.0	5.5
1,000 - 1,499	9.9	8.8	10.1	9.8	9.5	3.5	9.3
1,500 - 1,999	5.1	6.8	5.8	4.8	7.5	4.0	5.9
2,000 - 2,499	2.6	4.6	4.7	4.5	4.8	2.6	4.4
2,500 - 2,999	2.6	3.4	4.2	3.7	3.8	2.6	3.7
3,000 - 3,499	3.5	3.3	3.9	3.3	4.5	4.0	3.7
3,500 - 3,999	0.6	3.0	3.5	3.2	3.1	3.1	3.0
4,000 or more	1.9	5.0	4.9	4.9	3.7	6.6	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median \$	409	651	559	503	587	333	539
Average \$	772	1,101	1,097	1,029	1,039	930	1,037

Note: Estimated from sample data. Not adjusted to account for persons for whom amount of wage earnings was not reported in 1959.

each succeeding older age group. The decline in the median wage earnings is especially sharp for those over 65, who had the lowest median and average wage earnings of any age group.

The average wage earnings for the various age groups does not vary in the same way as does the median. The average wage earnings per farm operator working off the farm varied little between the age of 25 and 64. The average wage level was the lowest for farm operators under 25 rather than for those over 65.

The differences in the movement of median and average wage levels seems to arise as follows: A much higher proportion of farm operators under 25 and over 65 have wage jobs with earnings less than \$400 annually. In general, however, farm operators over 65 had a substantially higher proportion earning off-farm wages in excess of \$3,000 annually than did farm operators under 25. For the age groups between 25 and 64 years the distributions are very similar, with a slight upward shift in the proportions in the higher earnings groups as age increases. Thus, there is an increased tendency toward skewedness in the distribution of wage earnings in the age range from 25 to 65. This tendency is to be expected in light of what the data

already have shown. Only a fraction of the farm operators who work off their farms for wages do so year after year. That fraction, however, would gain seniority and experience as they grew older; so that with increased age one would expect to find a group in the higher end of the wage distribution and another group who, being casual or new entrants to the nonfarm labor market, commanded lower wages with advancing age.

Another aspect of the wage levels by age groups is the sharply different behavior of the wage levels over the three years included in the study. The median and average off-farm wage earnings of farm operators under 25 fell sharply from 1957 to 1958. This is consistent with the heavier concentration of employment of this age group in manufacturing and mining. The median wage level also declined substantially from 1957 to 1958 for farm operators over 65, although the average did not. In the intermediate age groups, decline in either the median or average wage earnings was at most slight.

During the economic expansion that occurred from 1958 to 1959 the increases in wages that occurred were concentrated largely in the 25-44 year age group and the 55-65 year group. Farm operators under 25 had lower median and average wage earnings in 1959 than they had in 1957, and the median level for those over 65 years old also was substantially lower in 1959 than two years earlier.

These statistics on wage earnings merely confirm earlier conclusions that the effects of the 1958 recession, to the extent they are discernable in these data, appear to have been greatest on the very young and very old among the farm operators working off their farms. This result shows up in both the swings in employment of these age groups and in the off-farm earnings of those who maintained their off-farm employment.

Wage Earnings and Income From Self-Employment

The distribution of off-farm wage earnings of farm operators in the three years 1957-1959 for operators having different levels of self-employment income is shown in Tables 21a, b, and c. They show that farm operators reporting less than \$2,000 of self-employment net income have substantially higher earnings from off-farm wages than any other group. The income from off-farm wages declines as net income from self-employment rises, except that among farm operators reporting self-employment income of over \$6,000 annually, the average wage earnings rise again.

TABLE 21a—Percentage distribution of 1957 OASDI farm operators for whom wage earnings were reported in 1957, by amount of wage earnings and net earnings from self-employment, for the conterminous United States

Off-Farm Wage Earnings in 1957 (Dollars)	Less than 2,000	2,000 3,999	4,000 5,999	6,000 or more	All Wage Earners
	(Percent)				
1 - 199	26.2	39.8	51.3	45.9	30.6
200 - 399	13.2	15.6	12.3	13.0	13.7
400 - 599	9.7	9.1	8.0	10.9	9.5
600 - 799	6.9	6.3	2.7	5.1	6.5
800 - 999	6.6	5.7	5.9	3.6	6.3
1,000 - 1,499	10.8	8.6	9.1	4.3	10.1
1,500 - 1,999	6.9	5.1	2.7	4.3	6.3
2,000 - 2,499	5.9	3.3	2.1	1.4	5.1
2,500 - 2,999	4.5	2.8	1.6	0.7	3.9
3,000 - 3,499	4.3	1.4	2.7	3.6	3.6
3,500 - 3,999	3.5	1.1	—	3.6	2.9
4,000 or more	1.5	1.2	1.6	3.6	1.5
Total	100.0	100.0	100.0	100.0	100.0
Median \$	626	331	195	267	518
Average \$	1,053	693	588	800	951

TABLE 21b—Percentage distribution of 1958 OASDI farm operators for whom wage earnings were reported in 1958, by amount of wage earnings and net earnings from self-employment, for the conterminous United States

Off-Farm Wage Earnings in 1958 (Dollars)	Less than 2,000	2,000 3,999	4,000 5,999	6,000 or more	All Wage Earners
	(Percent)				
1 - 199	25.7	38.6	52.7	47.5	31.2
200 - 399	13.6	13.4	13.0	13.7	13.5
400 - 599	9.5	9.8	9.6	8.2	9.5
600 - 799	6.8	7.0	4.1	3.3	6.5
800 - 999	5.8	5.7	2.4	5.5	5.5
1,000 - 1,499	10.0	9.7	6.5	6.6	9.6
1,500 - 1,999	7.1	4.2	4.5	2.7	6.1
2,000 - 2,499	5.8	4.3	0.7	5.5	5.1
2,500 - 2,999	4.8	2.2	1.4	1.1	3.8
3,000 - 3,499	4.6	2.5	2.1	2.7	3.9
3,500 - 3,999	4.4	2.2	1.4	2.2	3.6
4,000 or more	2.0	0.6	1.7	1.1	1.6
Total	100.0	100.0	100.0	100.0	100.0
Median \$	631	366	190	231	505
Average \$	1,100	741	559	658	966

TABLE 21c—Percentage distribution of 1959 OASDI farm operators for whom wage earnings were reported in 1959, by amount of wage earnings and net earnings from self-employment, for the conterminous United States

Off-Farm Wage Earnings in 1959 (Dollars)	Less than 2,000	2,000 3,999	4,000 5,999	6,000 or more	All Wage Earners
	(Percent)				
1 - 199	26.1	38.2	47.4	48.7	30.7
200 - 399	12.2	13.4	11.5	8.8	12.3
400 - 599	9.9	10.5	8.1	6.2	9.8
600 - 799	7.1	7.6	8.5	4.7	7.2
800 - 999	5.5	5.9	4.3	5.2	5.5
1,000 - 1,499	10.3	8.2	3.8	4.7	9.3
1,500 - 1,999	6.3	5.2	5.1	4.7	5.9
2,000 - 2,499	4.8	3.3	3.8	3.6	4.4
2,500 - 2,999	4.0	2.7	3.0	2.6	3.7
3,000 - 3,499	4.6	1.5	1.3	3.1	3.7
3,500 - 3,999	3.6	1.3	2.6	3.1	3.0
4,000 or more	5.5	2.2	0.4	4.7	4.5
Total	100.0	100.0	100.0	100.0	100.0
Median \$	645	370	239	224	540
Average \$	1,175	723	601	814	1,038

About one-half of the farm operators with self-employment income of \$4,000 or more had annual wage earnings of less than \$200, whereas only one-fourth of the group with self-employment income under \$2,000 was in this category. On the other hand, the group with the highest income (\$6,000 or more) from self-employment also had a relatively high proportion who made over \$3,000 annually in off-farm wages. Thus, farmers who had relatively high income from self-employment fell into two groups: one, which was very large, had modest off-farm wage earnings, apparently of an incidental nature; and, a small group with substantial off-farm wage earnings in addition to their relatively high self-employment income.

Farmers with less than \$2,000 of self-employment earnings tended to be more heavily concentrated in the middle range of off-farm wage earnings. Almost half of them had off-farm wage earnings which must have equaled or exceeded their earnings from farming, and for most of the rest, their off-farm wage earnings were a significant supplement to their low farm earnings.⁸

⁸Remember that many of this group used the optional reporting method suggesting that their actual net farm income was very low.

Farmers reporting net self-employment earnings from \$2,000 to \$3,999 had a very low proportion reporting off-farm wage earnings over \$3,000. The same was true of farmers reporting self-employment earnings in the \$4,000 to \$5,999 range. Among the latter group, 80 percent or more had wage earnings of less than \$1,000 annually, which would amount to about one-fifth of their average earnings from farming. This suggests that, in general, farmers reporting from \$2,000 to \$5,999 of self-employment income are not under-employed in their farming sufficiently to enable them to take full-time off-farm employment. A few have family or hired labor, enabling them to hold a full-time off-farm job in addition to their farm operation. But for most farmers in this group, off-farm wage employment is seasonal or on a part-time basis as judged by the earnings it provides.

There was no cyclical pattern apparent in the data as classified by level of self-employment income. The median and average level of wage earnings increased each year for the group with the lowest level of self-employment income. The groups with the highest income from self-employment seemed to experience some cyclical decline in wage earnings in 1959, and the median wage earnings of farmers having self-employment income of \$6,000 or more declined in each successive year. In any case, there is no evidence in these data to show that the impact of the recession was greatest on the low-income farmers, which is somewhat surprising given its concentration on the oldest and youngest age groups.

Sex, Race, and Off-farm Wage Earnings

Table 22 shows the distribution of off-farm wage earnings of OASDI farm operators by sex and color. It shows that a much lower proportion of the female farm operators had off-farm wage earnings of less than \$200 annually and a much higher proportion of the females had wage earnings of \$1,000 or more annually. Thus, it appears that female farm operators with off-farm jobs are much more likely to be employed on a regular or full-time basis than are male farm operators. Many female farm operators probably are landlords who participate in the management decisions on the farm but contribute little physical labor to the farm enterprise.

Negro farm operators who worked off their farms for wages were slightly less often employed in wage jobs paying less than \$200 annually than were non-Negro farm operators. On the other hand, the

frequency of Negroes in the \$200 to \$1,000 bracket of annual off-farm wages was much higher than for non-Negroes. The proportion of Negro farm operators with off-farm wages in excess of \$3,000 per year was very low compared to non-Negro farm operators in this category.

TABLE 22—Distribution of off-farm wage earnings of OASDI farm operators, 1957, 1958 and 1959, by sex and race

Off-Farm Wage Earnings In Dollars	Male			Female			Non-Negro			Negro		
	1957	1958	1959	1957	1958	1959	1957	1958	1959	1957	1958	1959
	(Percent)											
1 - 199	31.0	31.8	31.0	20.8	17.4	21.6	30.9	31.3	30.7	24.2	28.8	28.8
200 - 399	13.6	13.5	12.2	16.8	13.2	13.1	13.5	13.4	12.2	22.7	25.0	20.3
400 - 599	9.5	9.6	9.8	10.4	7.8	9.8	9.4	9.5	9.6	16.7	13.5	23.7
600 - 799	6.6	6.4	7.2	4.6	7.8	7.2	6.5	6.5	7.2	9.1	3.8	6.8
800 - 999	6.3	5.6	5.5	5.8	4.8	4.6	6.3	5.5	5.5	6.1	3.8	6.8
1,000 - 1,499	10.1	9.4	9.2	9.8	12.6	11.8	10.1	9.6	9.4	7.6	9.6	1.7
1,500 - 1,999	6.2	6.0	5.9	8.1	9.0	8.5	6.3	6.1	6.0	3.0	3.8	1.7
2,000 - 2,499	4.9	4.9	4.4	9.2	9.6	5.9	5.0	5.0	4.4	6.1	5.8	3.4
2,500 - 2,999	3.8	3.8	3.6	8.1	5.4	4.6	4.0	3.8	3.7	3.0	1.9	—
3,000 - 3,499	3.6	3.8	3.7	2.9	5.4	3.3	3.6	3.9	3.7	—	1.9	5.1
3,500 - 3,999	2.9	3.5	3.0	1.2	4.8	3.9	2.9	3.6	3.1	1.5	—	—
4,000 or more	1.5	1.6	4.5	2.3	2.4	5.9	1.5	1.6	4.6	—	1.9	1.7

It appears that many Negro farm operators are under-employed and work off their farms on a seasonal or part-time basis. Relatively few seem to hold good paying full-time off-farm wage employment in conjunction with their farm operation. This is, of course, consistent with other evidence showing that the earnings of nonwhites are much lower than whites, and that nonwhites are subject to high incidence of unemployment.

Wage Earnings by Industry of Employment

When the wage earnings by industry are discussed, it should be remembered that the data are not exactly parallel to the wage earnings per farm operator discussed in the immediately preceding sections. Wage earnings by industry represent the earnings in a specified industry, and some farm operators have wage earnings from more than one industry. The previous tables have dealt with wage earnings per individual, regardless of the number of wage jobs he held or the industry in which they were held. Table 23 deals with the median wage payments for each of the 10 industrial classifications contained in the data.

The outstanding feature of the data on earnings by industry is the very low average and median income of the wage jobs in government. This again highlights the conclusion that these are primarily jobs involving only a fraction of the time of the persons involved.

Median wage income was highest in manufacturing, followed by service industries and agriculture, in that order. The median income from finance, insurance, and real estate rose rapidly over the three years, for reasons which are not entirely obvious. The cyclical nature of income from manufacturing, construction, and trade is shown by the decline in median income which occurred in each industry in the data from 1957 to 1958. The other industries did not exhibit this cyclical movement in income during the recession year 1958.

TABLE 23—Median wage earnings by industry of wage job of OASDI farm operators, 1957, 1958, and 1959, for the conterminous United States

	1957		1958	1959
	Average	Median	Median	Median
	(Dollars)			
Agriculture, forestry and fishing	728	383	444	485
Mining	703	335	395	360
Contract construction	633	332	307	344
Manufacturing	1,178	747	693	769
Public utilities	616	337	338	319
Wholesale and retail trade	775	403	368	380
Finance, insurance and real estate	974	365	484	745
Services	949	612	621	605
Government not classified elsewhere	465	172	164	168
Miscellaneous ^(a)	761	412	208	326

^(a)Includes nonclassifiable and unclassified jobs.

Unfortunately, these data do not provide any estimate of the number of days or hours worked to receive the wage payment. Therefore, it is not possible to compare the relative wages of multiple jobholding farm operators to other workers in the same industries.

The Rewards of Continuous Multiple Jobholding

Most of the farm operators who are classified as multiple jobholders in any given year are not continuously in this status. For most farm operators, off-farm work is on an intermittent part-time basis, rather than a permanent occupation. The question that arises is why multiple jobholding by farm operators is, for most of them, a transitory situation. Is it because it does not produce higher income for most farm operators than can be obtained by farming?

Of course, it is not possible to answer the question directly from secondary data such as the OASDI statistics. It is possible, however, to observe how the income of those who are regular multiple jobholders compares with those who are not multiple jobholders. It

also is possible to compare the earnings from off-farm employment of those who did not have such employment in the previous year with the earnings of those who did.

Table 24 shows the distribution of total taxable earnings of two groups of farm operators in 1959. One group consists of those who were multiple jobholders in every year 1955-59, and the other consists of farm operators who were only farm operators during the same five years. The median income of farm operators who were continuous multiple jobholders was 61 percent higher than that of farm operators who had not worked off their farm during the period. Forty-nine percent of the multiple jobholders had total taxable earnings in excess

TABLE 24—Distribution and median earnings in 1959 of farm operators who were and were not multiple jobholders, 1955-59

Total Covered Earnings	Continuous Multiple Jobholders	Farm Operators Who Never Were Multiple Jobholders
(Dollars)		(Percent)
Under 500	.3	2.4
500 - 990	5.1	12.2
1,000 - 1,990	23.5	42.2
2,000 - 2,990	21.9	17.0
3,000 - 3,990	16.2	9.7
Over 4,000	32.8	16.5
Median Income	\$2,953	\$1,835

of \$3,000 in 1959, whereas only 26.2 percent of those who only farmed had income of this level. Only 5.3 percent of the multiple jobholders had total taxable earnings under \$1,000 in 1959, while 14.6 percent of the individuals who were farm operators without off-farm earnings were in this group.

The much higher earnings of regular multiple jobholders are also indicated in Table 25. It shows the distribution of and average wage earnings in 1957 for multiple jobholders who had off-farm wage coverage the previous year and for those who did not. Sixty-three percent of those without wage earnings the previous year had off-farm wage earnings of less than \$400. Only 37 percent of those who had off-farm wage jobs in two consecutive years had wage earnings of less than \$400 in the second year. A much higher proportion of those with wage employment in the previous year had wages over \$1,000. As a result, the average wage earnings of this group were more than twice the average

off-farm wage earnings of those without off-farm wage employment the previous year.

These data indicate that farm operators who are regular multiple jobholders tend to be the ones who have the higher off-farm wage earnings in any given year. Apparently off-farm jobs do not result in an offsetting decline in farm income, because farm operators who are continuous multiple jobholders have substantially higher incomes than farm operators without off-farm employment. Continuous multiple jobholding results in a higher income for the individual, so economic incentive probably is not the reason for its relative infrequency.

Indications are that continuous multiple jobholding by farm operators is a function of age. The physical demands of multiple jobholding may be such as to limit its frequency. Moreover, having become

TABLE 25—Distribution and average wage earnings in 1957 for farm operators with and without off-farm wage coverage in the previous year

Off-Farm Wage Earnings in 1957 (Dollars)	Operators Without Off-Farm Wage Employment in 1956	Operators With Off-Farm Wage Employment in 1956
	(Percent)	
1 - 199	46.7	24.6
200 - 399	16.9	12.5
400 - 599	9.8	9.4
600 - 799	6.0	6.8
800 - 999	4.3	7.1
1,000 - 1,499	7.2	11.1
1,500 - 1,999	3.5	7.3
2,000 - 2,499	2.5	6.0
2,500 - 2,999	1.3	4.9
3,000 - 3,499	1.4	4.4
3,500 - 3,999	0.2	3.9
4,000 or more	0.2	2.0
Total	100.0	100.0
Median (\$)	461	711
Average (\$)	514	1,115

established in a relatively well-paying nonfarm job, many farm operators may conclude that the income from their farm is not sufficient to pay for the work involved in multiple jobholding. Once the off-farm job becomes a full-time job, it apparently becomes a way out of the agricultural industry for most farm operators.

APPENDIX A

THE SOURCE AND NATURE OF THE DATA

This research is based upon data made available to Michigan State University by the Social Security Administration (SSA) of the United States Department of Health, Education, and Welfare. The SSA maintains, for statistical and research purposes, a 1 percent Continuous Work-History sample of persons covered by the program. This sample is obtained by assignment to it at the time the individual's Social Security number is initially assigned. Once an individual is included in the sample, he remains in it. Thus, the sample is a continuous register sample, inasmuch as an individual can be followed year after year in it.

Social Security coverage was extended to farm operators in 1955. Shortly thereafter, Michigan State University contracted with the Social Security Administration to receive certain data on all persons in the Continuous Work-History Sample who were classified as farm operators or farm laborers in any year since 1955. Thus, the data reported here include all persons who were classified as farm operators in any year from 1955 through 1959, regardless of whether or not they continued to report income from agricultural sources. Data on the persons included in the sample came from two sources. One was the Continuous Work-History record of the individual. This included information on the individual's age, race, type of covered employment for several years, income from covered employment for past years, total income from self-employment, location of self-employment, and certain other information. In addition, for each individual in the 1 percent sample, there is certain information filed by his employer and stored by Social Security in an employee-employer file. This contains information regarding the industrial classification of the employer, wage payments to the employee, and county of location of employment. Since each employer must file this information, an individual working for wages for more than one employer would have a separate employee-employer card for each employer in the year. Thus, the number of employers and the income received from each can be identified for all persons who worked as wage earners.

The fact that the data are gathered for program record purposes means that they contain some limitations in their usage for research purposes. In dealing with the farm operator population, these were

bothersome, especially in the early years of coverage. As will be seen later, only limited use was made of the data prior to 1957 because of these limitations.

One of the difficulties arising from the data is that from the beginning of the program there has been a limit to the amount of earnings which could be credited to an individual's account in any one year. This upper limit on covered earnings has been as follows:

1. \$3,000 received from each employer for employment in any year during the period from 1937 through 1939;
2. \$3,000 received for employment in any year during the period from 1940 through 1946;
3. \$3,000 paid in any year during the period from 1947 through 1950;
4. \$3,600 paid in any year during the period from 1951 through 1954;
5. \$4,200 paid in any year during the period from 1955 through 1958;
6. \$4,800 paid in any year since 1959.

Consequently, the maximum covered earnings that have been reported were \$4,200 annually from 1955 through 1958 and \$4,800 since 1959. However, the sample records do contain information on self-employment net earnings above this maximum. For legal reasons, wages are counted first; so farm operators who receive the maximum covered annual earnings from wages are not required to report their earnings from farm self-employment for Social Security purposes. This means that farm operators who have nonfarm wage earnings in excess of the maximum are not included in our sample. This exclusion, however, is not as serious as it appears; because the SSA estimates that less than 50,000 farm operators are excluded from the classification by this process. The number excluded is small compared with the more than two million farm operators that report annually.

A somewhat more serious problem exists because of the minimum cut-off point and the optional method of reporting income accorded farmers under the law. In order to be reported, net income from self-employment must be at least \$400 in a year. In 1955, farm operators reporting on a cash basis were permitted to count one-half their gross income as net self-employment earnings provided that their gross farm income for the year was at least \$800 and not more than \$1,800. If their gross earnings were more than \$1,800 and their net earnings

less than \$900, they could report net self-employment earnings as \$900 under the optional method.

Beginning in 1956, the optional method permitted all farm operators with annual gross incomes of at least \$600 and not more than \$1,800 to report two-thirds of their gross farm earnings as net income from self-employment. Self-employment earnings could be reported as \$1,200 if gross earnings were more than \$1,800 but actual net earnings were less than \$1,200.

The practical effect of these cut-off limits and optional reporting methods is to substantially blur the information available from the data regarding what are generally called low-production or subsistence farms. In 1955, farm operators with less than \$800 gross earnings were excluded from reporting. Since 1956, this figure has been lowered to \$600. However, some low-income farms could, by using the optional reporting method, report earnings from farm self-employment higher than they actually obtained. Thus, some of the low-income farms reported in the Census will report net income figures higher than actually realized for OASDI coverage.

For instance, in 1959, 390,000 self-employed farmers used the optional method of reporting a percentage of gross income, and 290,000 of this group reported the maximum net earnings under the option.⁹ This suggests that most, if not all, of this group were reporting taxable earnings for coverage purposes which were higher than their actual net earnings from farm self-employment.

Roughly, it appears that the sample of farm operators covered by the OASDI data approximates what are called commercial farm operators in the Census of Agriculture.¹⁰ Included, also, are some persons classified as "participating landlords" under the 1956 legislation that permitted their income from farm ownership to be counted as farm self-employment earnings if they worked a given number of days on the farm, or if they participated significantly in the management of the farm. Indications are that about 200,000 such participating landlords were included in the early years of the program. It should be recognized that the counting of nonfarm wages and salaries prior to the inclusion of self-employment earnings will exclude from the sample individuals who may have been farm landlords but who had nonfarm wage earnings in excess of the coverage limit. Thus, those counted as

⁹*Social Security Farm Statistics*, U. S. Department of Health, Education, and Welfare, August 1961, A:S-7.

¹⁰See Appendix B for a comparison of the sample characteristics with other sources of data on the farm population.

participating landlords were individuals whose income from farming was needed to bring their total covered earnings up to the cut-off point. In other words, the lawyer or businessman who owned a farm typically would not be included as a participating landlord.

The data relating to income in these statistics should more properly be classified as earnings. For self-employed persons, it includes the net earnings from the business as calculated for tax purposes. It does not include capital gains and losses, income from investments, pensions, or transfer payments. Conceptually, it amounts to the net earnings that an individual obtains for his labor, management, and owned resources used in his business. For farmers, it may, of course, include returns that actually are returns to unpaid family labor.

Two classifications of self-employment income are available from the data. Individuals who have only self-employment earnings from farming report these on Schedule F of the income tax form. Those who have self-employment earnings from nonfarm sources report on Schedule C. An individual with net earnings from both a farm and nonfarm business reports farm earnings on Schedule F, computes nonfarm earnings on Schedule C, combines net earnings from all sources on Schedule C, and files his self-employment income report on Schedule SE from Schedule C. Thus, persons in this category are classified as having self-employment income from both sources; and the amount from each source cannot be identified. About 9 percent of those reporting as farm operators are in this category, and this figure represents the upper limit since some persons having only self-employment earnings from farming report on Schedule C.

Information on income from wages comes from the employer. For farm wages since 1957, if the employer pays a worker more than \$150 per year or if the worker is employed for cash for 20 days or more in a year on a time basis, the employer must report and pay the Social Security tax. In most nonfarm employment, wages must be reported by the employer if they are \$1 or more from a single employer in a single quarter. The exception to this is in domestic or non-profit employment where a worker must make \$50 or more per quarter from a given employer to be reported. The Continuous Work-History records show whether wages were from farm employment, non-farm employment, or both.

Despite the limitations arising from the optional reporting method and the upper limit on covered earnings, it is believed that the income data in these statistics have advantages over those gathered by survey

methods: First, because it is for tax purposes, it is more likely to come from records; and the penalties attached to misreporting are understood. Finally, although it is earned income rather than total income, the exclusion of transfer payments, etc., may reduce the under-reporting and thereby increase the interpersonal comparability.

The greatest advantage of the OASDI sample is its continuous register nature. Hitherto, we have had only cross-sectional data for a given point in time, with no way of relating an individual at one point in time to his situation at an earlier period. The OASDI sample makes it possible to follow a given group of individuals through time, thus indicating paths of change as well as its total dimension.

This feature of the OASDI sample creates serious problems in analysis as well as affording new opportunities. In order to follow the same individual through time, it is necessary to identify each record for that individual. Since multiple jobholders have more than one record, and may have several, this involved major storage and analysis problems, not all of which could be solved satisfactorily even by electronic computers.

APPENDIX B

THE OASDI FARM-OPERATOR LABOR FORCE COMPARED WITH OTHER DATA ON FARM OPERATORS¹¹

The objectives of this appendix are two-fold: (1) to define and describe the farm-operator labor force represented by OASDI data and (2) to examine the comparability of OASDI farm-operator data with those provided from other sources. The first three sections deal, therefore, with the definition of the OASDI farm-operator labor force and the comparability of the coverage of OASDI farm-operator data, in terms of the number of persons represented, with the coverage of the Current Population Survey and the Census of Agriculture. The concluding sections examine the characteristics of the farm-operator labor force represented by OASDI sample data. Estimates for the year 1957 will be taken as a base in illustrating the relationships between the coverage of OASDI data and the coverage of data from other sources.

The OASDI Farm-Operator Labor Force

As used throughout this study, the term "OASDI farm-operator labor force" refers to the labor force comprising persons who are identified by OASDI records as recipients of covered earnings from agricultural self-employment in a specified year.

Enumerative Data

Although this study relies primarily on OASDI sample data, some enumerative statistics on the agricultural labor force have been tabulated by the Social Security Administration.¹² Since the inclusion of farm operators in the OASDI program beginning with the year 1955, the number of persons reporting agricultural self-employment earnings for Social Security coverage increased from about 2.3 million in 1955 to a high of nearly 2.6 million in 1956 and then gradually declined to a low of around 2.2 million in 1959 (Table A-1). The increase in the number of persons with agricultural self-employment

¹¹This appendix is taken from Arley D. Waldo, *The Off-Farm Employment of Farm Operators In the United States*, unpublished Ph. D. Thesis, Michigan State University, 1962.

¹²Published data on the agricultural labor force can be found in the following reports issued by the U. S. Bureau of Old-Age and Survivors Disability Insurance: (1) *Farm Coverage Statistics, 1956* (Baltimore: U. S. Bureau of Old-Age and Survivors Disability Insurance, December 1959); (2) *Social Security Farm Statistics, 1955-1959* (Baltimore: U. S. Bureau of Old-Age and Survivors Disability Insurance, August 1961); and (3) *Handbook of Old-Age and Survivors Disability Insurance Statistics: Employment, Wages and Insurance Status of Workers in Covered Employment, 1955* (Baltimore: U. S. Bureau of Old-Age and Survivors Disability Insurance, 1961).

coverage from 1955 to 1956 was principally due to the fact that materially participating farm landlords became eligible for coverage beginning with the year 1956 and that farm operators were generally better acquainted with the program in its second year. The decline in the number of persons covered since 1956 reflects both the dropping out of persons who were able to qualify for benefits after a short period of participation, and perhaps, the decline in the number of persons with farm earnings above the level required for coverage.

The number of persons reporting agricultural self-employment earnings for Social Security coverage has been equal to roughly one-half the estimated number of farms as defined in the Census of Agriculture. The major reason for the difference in the size of the OASDI farm-operator labor force and the total number of farms is the large number of persons defined as farm operators in the Census of Agriculture who do not have sufficient income from agriculture to satisfy the minimum earning requirements for participation in the Social Security program as farm operators.

TABLE A-1—Number of persons reporting farm self-employment earnings for Social Security credits for the conterminous United States, 1955-1959

Year	Number Reporting ^(a)
1955	2,337,500
1956	2,555,900
1957	2,416,500
1958 ^(b)	2,389,800
1959 ^(b)	2,210,800

^(a)Includes estimates for late returns not yet received.

^(b)Preliminary estimates.

Source: Tabulated from U. S. Bureau of Old-Age and Survivors Disability Insurance, *Social Security Farm Statistics, 1955-1959* (Baltimore: U. S. Bureau of Old-Age and Survivors Disability Insurance, August 1961). Table 3, p. 6.

Sample Data

OASDI sample data on the farm-operator labor force represent persons in the Continuous Work-History Sample who reported agricultural self-employment earnings for Social Security coverage in specified years. All estimates relating to the 1957 OASDI farm-operator labor force which are given in subsequent sections of this study have been tabulated or estimated for sample data. Because of sampling variability and the incidence of reports processed after the cut-off date of the Continuous Work-History Sample, estimates derived from sample data

will not necessarily agree with farm coverage statistics published by the Social Security Administration.

The 1937-58 Continuous Work-History Sample represents, on the basis of a 1 percent sampling ratio, a total of 2,185,900 individuals with covered earnings from agricultural self-employment in the year 1957. This estimate excludes, as does the entire analysis, farm operators outside the conterminous United States. Assuming a sampling ratio of 1 percent, the 1957 OASDI farm-operator labor force represented by the 1937-58 Continuous Work-History Sample accounts for about 90 percent of the total number of persons with agricultural self-employment coverage in 1957. Estimates of the size of the OASDI farm-operator labor force derived from the Continuous Work-History Sample are subject to sampling variability. The principal reason for the disparity between the estimate given in Table A-1 and that based upon the assumption of a 1 percent sampling ratio is, however, the incidence of persons reporting after the cut-off date of the 1937-58 Continuous Work-History Sample.

To recapitulate, the 1957 OASDI farm-operator labor force generally comprises persons with net farm self-employment earnings in 1957 of \$400 or more, plus persons with net farm earnings of less than \$400 and gross earnings of \$600 or more who reported under the optional method. Generally excluded from the 1957 OASDI farm-operator labor force are the following: (1) persons with net agricultural self-employment earnings of less than \$400 and gross earnings of less than \$600, (2) persons with net earnings of less than \$400 and gross earnings of \$600 or more who did not elect to report under the optional method, and (3) persons with wage earnings of \$4,200 or more regardless of the amount of their self-employment earnings. The 1957 OASDI farm-operator labor force also includes, on the same basis as bona fide farm operators, materially participating farm landlords.

The characteristics of persons included in the 1957 OASDI farm-operator labor force merit examination; but, first, some attention should be given to the number of persons included in other statistics on the farm-operator population. Discussion for purposes of comparison will be limited, insofar as possible, to the year 1957.

Current Population Survey

The Current Population Survey, conducted by the Bureau of the Census, provides a wide variety of information on the United States population and the current labor force. Current Population Survey

statistics are obtained from a monthly survey of a rotating sample of approximately 35,000 interviewed households distributed over the entire United States.¹³ Labor force statistics derived from the Current Population Survey are reported monthly in the U. S. Bureau of Labor Statistics publication, *Employment and Earnings*.¹⁴ Three types of statistics are available from the Current Population Survey: (1) estimates of the total population and number of households classified by place of residence, (2) estimates of the current labor force classified by occupation and by industry of employment and class of worker, and (3) estimates of the number of individuals and households receiving income from specified sources.

In the Current Population Survey, interviewed members of households are asked to report the labor force status of all household members who are 14 years of age or older. Employed persons comprise, by definition, all persons who worked as employees or in their own business or profession for 15 hours or more during the survey week. Persons temporarily away from their work because of illness, bad weather, vacations, and similar reasons are also classified as employed persons. Individuals who held more than one job during the survey week are classified in the occupation and industry in which they worked the greatest number of hours. Thus, labor force estimates derived from the Current Population Survey represent an unduplicated count of the current labor force.

The Current Population Survey included, for the period from 1951 through 1956, approximately 21,000 interviewed households. About 2,200 of these households, as determined by place of residence, were farm households. Since 1956, when the size of the sample was expanded, about 3,500 farm households have been included in the survey.¹⁵

The Farm Population

In accordance with the procedures of the Census of Population, Current Population Survey statistics include estimates of the population classified by place of residence. For the period from 1950 through 1959, CPS estimates classified persons as either urban or rural residents on the basis of residence definitions used in the 1950 Census of Popu-

¹³For a detailed discussion of procedures and definitions see U. S. Bureau of the Census, *Current Population Reports*, Series P-23, No. 5 (May 9, 1958).

¹⁴Prior to July 1, 1959, CPS Labor Force Statistics were published in U. S. Bureau of the Census, *Current Population Reports*, Series P-57.

¹⁵U. S. Bureau of the Census, *Current Population Reports*, Series P-27, No. 24 (October 20, 1957), p. 3.

lation. Under the definitions of the 1950 Census, the urban population comprised all persons living in the following places:

1. Places of 2,500 or more inhabitants incorporated as cities, boroughs, and villages;
2. Incorporated towns of 2,500 or more inhabitants except in New England, New York, and Wisconsin, where "towns" are simply minor civil divisions of counties;
3. The densely settled urban fringe, including both incorporated and unincorporated areas, around cities of 50,000 or more inhabitants; and
4. Unincorporated places of 2,500 or more inhabitants outside of any urban fringe.¹⁶

All persons living outside of these places are classified as rural residents.

The rural population was further divided into two categories: (1) rural-nonfarm, and (2) rural-farm. Persons in the latter category make up the farm population. For Current Population Surveys conducted during the period from 1950 through 1959, the farm population included all persons living on farms as determined by their response to the question, "Is this place on a farm (or ranch)?" If respondents raised the question, enumerators were instructed to classify all places in rural areas consisting of house and garden only for which cash rent was paid as nonfarm residences. Persons in institutions, motels, summer camps, and tourist camps were also classified as nonfarm residents.

The Current Population Survey and the 1950 Census of Population differ in their treatment of unmarried college students living away from home. In the 1950 Census of Population, college students were enumerated as residents of the communities in which they lived while attending school. The Current Population Survey defines such persons as residents of their parents' homes. Consequently, a larger number of college students are included in CPS estimates of the farm population.¹⁷

The farm population in 1957 included 21,606,000 persons,¹⁸ and it is estimated that there were 5,218,000 farm households in March 1957.¹⁹ The latter estimate is substantially higher than the estimate

¹⁶For more detailed definitions see U. S. Bureau of the Census, *U. S. Census of Population: 1950*, Vol. II, Part 1, Ch. B, pp. V-X.

¹⁷U. S. Agricultural Marketing Service, *Farm Population: Estimates for 1950-59*, AMS-80 (1959), February 1960, p. 11.

¹⁸*Ibid.*, Table IV, p. 10. Under the more restrictive definition adopted in 1960, the farm population is estimated to have been 17,656,000 in 1957. See U. S. Economic Research Service, *Farm Income Situation* (FIS-187), July 1962, pp. 8-11.

¹⁹U. S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 94 (August 24, 1959), Table III, p. 2.

of the 1957 OASDI farm-operator labor force and somewhat exceeds the estimate of 4,856,000 farms in 1957.²⁰ A special study collating information from the 1950 Censuses of Population, Housing, and Agriculture found that 7.5 percent of the persons classified as farm residents in the 1950 Census of Population lived on places that did not qualify as farms in the 1950 Census of Agriculture and that 5 percent of the persons living in farm-operator households as defined in the Census of Agriculture were classified as nonfarm residents in the Census of Population.²¹ The population of farm-operator households was equal to 93.8 percent of the rural-farm population in 1950,²² and the disparity between the number of rural-farm households and the number of farms in 1957 was of approximately the same magnitude. The number of rural-farm households exceeded the number of farms by 362,000 in 1957, and the number of farms was equal to 93.1 percent of the number of rural-farm households.

Place of residence, it may be contended, is not the most useful basis of classification for analysis of the farm-operator labor force. Many rural-farm residents are employed on a full-time basis in non-agricultural industries and do not depend upon farming as a means of livelihood. Some persons, who may be classified as part-time farmers, operate farms as a supplementary source of income. Others operate small farms and have no off-farm employment. Some of these persons are in semi-retirement, and others may be temporarily unemployed members of the nonfarm labor force who have fallen back on farming as a means of subsistence. Conversely, some persons living in rural-nonfarm and urban places are primarily dependent upon agriculture for their livelihood and should be regarded as members of the farm-operator labor force. The main reason for the large discrepancy between the number of rural-farm households in 1957 and the size of the 1957 OASDI farm-operator labor force is the large number of employed persons among the heads of farm households whose primary employment is in nonagricultural industries and whose earnings from farming, if any, are not sufficient to qualify for agricultural coverage under the Social Security program.

²⁰U. S. Department of Agriculture, *Agricultural Statistics: 1960* (Washington: U. S. Government Printing Office, 1961), Table 687, p. 488.

²¹U. S. Department of Agriculture, *Major Statistical Series of the U. S. Department of Agriculture*, Agricultural Handbook No. 118, Vol. 7, *Farm Population, Employment, and Levels of Living*, September 1957, p. 6.

²²U. S. Bureau of the Census, *Farms and Farm People: Population, Income, and Housing Characteristics by Economic Class of Farm* (Washington: U. S. Government Printing Office, 1952), p. 43.

Industry and Occupation

Labor force estimates derived from the Current Population Survey include farm operators in two series. These series are based upon monthly estimates of the current labor force classified both by occupation and by industry and class of worker.

It was estimated that 6,222,000 persons were employed in agriculture in 1957.²³ This estimate included 1,687,000 wage and salary workers, 3,304,000 self-employed persons, and 1,231,000 unpaid family workers. The classification system used by the Bureau of Labor Statistics is designed to give an unduplicated count of the current labor force. Persons who held more than one job during the survey week are therefore classified in the occupation and industry in which they worked the greatest number of hours. Consequently, some farmers with off-farm employment are classified as working in nonagricultural industries.

Estimates derived from the Current Population Survey of July 1957, indicated that a substantial number of workers designated as having primary jobs in nonagricultural industries also held secondary employment as farm operators. A total of 3,547,000 persons were classified as self-employed workers in agriculture on the basis of the July 1957, survey.²⁴ Information on multiple jobholders, obtained in the same survey, indicated that 529,000 workers held secondary jobs (as determined by the number of hours spent at each of two or more jobs) as self-employed workers in agriculture.²⁵ This estimate included 45,000 workers whose primary job classification was wage and salary worker in agriculture and 484,000 workers whose primary classification was wage and salary worker in nonagricultural industries.²⁶ The total number of workers with agricultural self-employment as a secondary job was equal to 14.9 percent of the number of workers with primary jobs as self-employed workers in agriculture. Counting both primary and secondary jobholders, 4,076,000 persons were self-employed in agriculture in July 1957.

Approximately 3,329,000 persons were employed as farmers and

²³Average of monthly estimates for the calendar year. U. S. Bureau of the Census, *Current Population Reports*, Series P-50, No. 85 (June, 1958), Table 16, p. 16.

²⁴U. S. Bureau of the Census, *Current Population Reports*, Series P-57, No. 181 (August, 1957), Table 7, p. 14.

²⁵U. S. Bureau of the Census, *Current Population Reports*, Series P-50, No. 80 (February, 1958), Table 1, p. 2.

²⁶Self-employed workers and unpaid family workers with a secondary farm or business were not counted as multiple jobholders.

farm managers in 1957.²⁷ The occupational classification "farmers and farm managers" includes most persons classified as self-employed workers in agriculture plus some persons who are classified as hired workers in the industrial classification.²⁸ The July 1957 study of multiple jobholding found that the number of individuals with secondary jobs as farmers and farm managers was equal to 14.9 percent of the total number of workers with farming as their primary occupation.²⁹ Approximately 4,049,000 persons, counting both primary and secondary jobholders, held jobs as farmers and farm managers in July 1957.³⁰

The estimate of 4,076,000 persons with primary or secondary jobs as self-employed workers in agriculture and the estimate of 4,049,000 persons with primary or secondary occupations as farmers and farm managers are both substantially higher than the estimate of the number of persons reporting agricultural self-employment earnings for Social Security coverage in 1957. The disparity between the size of the 1957 OASDI farm-operator labor force and the size of the labor force represented by estimates from the Current Population Survey is chiefly due to the low farm earnings of many persons included in the CPS estimates. A rough indication of the number of workers excluded from agricultural self-employment coverage in the Social Security program because of income restrictions is given below.

Recipients of Farm Self-Employment Income

The Bureau of the Census has estimated that 4,100,000 persons 14 years of age or older received income from agricultural self-employment in 1957.³¹ Because it is based upon individuals with earnings from agricultural self-employment, this estimate corresponds closely with the method used in defining the OASDI farm-operator labor force. The age limit applied to estimates from the Current Population Survey is inconsequential in comparing the labor force covered by the two sources. However, the coverage of OASDI farm-operator

²⁷Average of estimates made in January, April, July, and October, 1957. U. S. Bureau of the Census, *Current Population Survey*, Series P-50, No. 85, Table 13, p. 36.

²⁸For a discussion of occupation, industry, and class of worker designations see U. S. Bureau of the Census, *U. S. Census of Population: 1950*, Vol. II, Part 1, Ch. B, pp. XVI-XVIII.

²⁹U. S. Bureau of the Census, *Current Population Reports*, Series P-50, No. 80, Table 4, p. 3.

³⁰It was estimated that 3,524,000 persons were employed as farmers and farm managers in July, 1957. The estimate of 4,049,000 was calculated as 114.9 percent of 3,524,000. U. S. Bureau of the Census, *Current Population Reports*, Series P-57, No. 181, Table 7, p. 14.

³¹U. S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 30 (December, 1958), Table 27, p. 45. Self-employment income from farming was received by 3,583,000 families and 210,000 unrelated individuals.

data is restricted by the amount of earnings required for participation in the Social Security program.

The distribution of persons receiving agricultural self-employment income in 1957 by amount of income received, as estimated from the Current Population Survey, is given in Table A-2. Around 14.6 percent of the persons receiving agricultural self-employment income during the year had net losses, and 31.0 percent had farm self-employment earnings in the range of from \$1 to \$499. Assuming that persons in the latter class were uniformly distributed over the class interval, 24.8 percent of the income recipients had farm self-employment earnings in the range of from \$1 to \$399, and a total of 39.4 percent (1,615,000 persons) had farm incomes of less than \$400. The estimated number of persons with agricultural self-employment earnings of \$400 or more in 1957 is 2,485,000. This estimate is in fairly close agreement with the estimate of 2,416,500 persons reporting agricultural self-employment earnings for Social Security coverage in 1957.³²

The correspondence between the two estimates is, however, somewhat superficial. First, although the minimum self-employment income necessary for OASDI coverage under the regular reporting method is \$400, the optional reporting method allowed some persons with net farm incomes of less than \$400 to enter the 1957 OASDI farm-operator labor force. In 1957, approximately 500,000 persons used the optional method for reporting agricultural self-employment earnings.³³ This group included both individuals with net earnings of \$400 or more who used the option to increase their earnings under the program, and persons with net earnings of less than \$400 who could not have received coverage under the regular reporting method. Second, persons with wage earnings of \$4,200 or more in covered employment were not required to report self-employment earnings for Social Security coverage, regardless of amount, because they received maximum coverage on the basis of wage earnings. In 1955, approximately 40,000 farm operators did not file self-employment tax returns for this reason.³⁴ Third, a few individuals presumably combined net farm income of less than \$400 with nonfarm self-employment earnings to satisfy minimum earning requirements for OASDI participation. Finally, the 1957

³²Above, Table A-1.

³³U. S. Bureau of Old-Age and Survivors Disability Insurance, *Social Security Farm Statistics, 1955-1959*, Table 1, p. 3.

³⁴John C. Ellickson, "Distribution of Farm Incomes," *Agricultural Finance Review*, Vol. 23 (April, 1962), p. 27.

TABLE A-2--Persons 14 years of age and over, by farm self-employment income, for the conterminous United States, 1957

Farm Self-Employment Income (Dollars)	Number ^(a)	Percent
Loss	598,600	14.6
1 - 499	1,271,000	31.0
500 - 999	549,400	13.4
1,000 - 1,499	410,000	10.0
1,500 - 1,999	237,800	5.8
2,000 - 2,499	303,400	7.4
2,500 - 2,999	139,400	3.4
3,000 - 3,499	200,900	4.9
3,500 - 3,999	94,300	2.3
4,000 - 4,499	82,000	2.0
4,500 - 4,999	53,300	1.3
5,000 - 5,999	73,800	1.8
6,000 - 6,999	32,800	0.8
7,000 - 9,999	41,000	1.0
10,000 - 14,999	8,200	0.2
15,000 - 24,999	4,100	0.1
25,000 and over	--	--
Total	4,100,000	100.0

^(a)Calculated from percentage distribution.

Source: U. S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 30 (December 1958) Table 27, p. 45.

OASDI farm-operator labor force included materially participating farm landlords on the same basis as bona fide farm operators. In addition, of course, estimates based upon sample data are subject to errors in reporting and to sampling variability.

It appears, however, that most farm operators with net farm earnings of \$400 or more were included in the 1957 OASDI farm-operator labor force. Assuming that one-half of the individuals reporting under the optional method had net farm earnings of more than \$400, about 2.2 million farm operators with net earnings from self-employment of \$400 or more were included in the 1957 OASDI farm-operator labor force. It may be assumed that around 2.5 percent of all farm operators with net farm earnings of \$400 or more had wage earnings of \$4,200 or more and were, therefore, unable to receive Social Security coverage of agricultural self-employment earnings. Thus, roughly 2.4 million farm operators with net farm earnings of \$400 or more appear to have been required by law to report farm self-employment earnings for Social Security coverage in 1957. Since the size distribution of farm self-employment income is highly skewed, this estimate can be regarded only as a rough approximation. However, it does suggest that OASDI

farm-operator data is generally representative of individuals with net farm incomes of \$400 or more.

Census of Agriculture

The quinquennial Census of Agriculture is probably the best known source of data on American agriculture and the farm-operator labor force. The primary objective of the agricultural census is, however, to obtain information on agricultural production and organization. Some information indicative of the characteristics of the agricultural labor force is available from the Census, but the usefulness of the Census for analysis of the farm-operator labor force is somewhat limited by the definitions and procedures which are followed.

Definitions and Procedures

The procedure adopted in the Census of Agriculture is first to define "a farm" and then to designate one person per farm as "the farm operator." The number of farms and the number of farm operators are thus regarded as identical. Only one person is enumerated as a farm operator in the case of farm partnerships. Moreover, the designation "farm operator" is made without regard to place of residence or to the primary occupation of the individual.

The Census definition of a farm is purposely designed so as to include nearly all agricultural production in the United States. In the 1954 Census of Agriculture, places of 3 acres or more were counted as farms if the annual value of agricultural production, exclusive of home-garden products, amounted to \$150 or more. Agricultural products either used at home or sold were included in computing the value of farm production. Places of less than 3 acres were counted as farms if the annual value of products sold amounted to \$150 or more.

The definition of a farm used in the 1959 Census of Agriculture differed from that used in 1954. Places of 10 acres or more were counted as farms in 1959 if the annual value of agricultural products sold amounted to \$50 or more. Places of less than 10 acres were counted as farms if receipts from the sale of farm products were at least \$250 for the years.

In both 1954 and 1959, places where the value of agricultural products sold was below the minimum because of crop failure or other unusual conditions and places which were being operated for the

first time were counted as farms if they could be expected to equal or exceed the minimum production requirements under normal conditions. All land operated under the control of a single individual or partnership was counted as one farm.

Occupation, not place or residence, would seem to be the most appropriate criterion for delineation of the farm-operator labor force. Because of its definitions and procedures, the Census of Agriculture provides coverage of the farm-operator labor force which conforms to neither residence nor occupational criteria. Since the Census counts farm operators without regard to place of residence, it includes as farm operators some persons who live in nonfarm places. At the same time, the Census fails to include some farm operators living on farms because they are members of farm partnerships. With reference to occupational status, the Census includes a large number of persons who operate farms of a very modest scale and whose primary occupations are outside agriculture.³⁵

Number of Farm Operators

Nearly 4.8 million farm operators were enumerated in the 1954 Census of Agriculture. The distribution of farms in 1954 by economic class of farms is given in Table A-3. Excluding part-time farms, only 3.3 million farms had agricultural production valued at \$250 or more, and fewer than 2.9 million farms (60 percent of all farms) had gross receipts from the sale of agricultural products of as much as \$1,200.

The number of farms in the United States decreased to 3.7 million in 1959, according to final reports from the 1959 Census of Agriculture.³⁶ About 232,000 of the .9 million decline in the number of farms from 1954 to 1959 was attributable to changes in the definition of a farm. As defined in 1954, the number of farms counted in the Censuses actually decreased from 4.8 million in 1954 to 3.9 million in 1959. The number of farms in 1959 by economic class of farm is given in Table A-4. The class intervals and definitions were not the same for the two Censuses, but it is possible to compare the number of farms with gross sales of \$2,500 or more. Table A-5 shows the estimated number of farms with sales of less than \$2,500 for the period from

³⁵Ducoff has pointed out that of 5,431,000 farm-operator households in 1950, less than 40 percent were wholly dependent on agriculture for their livelihood and about 30 percent listed nonagricultural earnings as the major source of family income. Louis J. Ducoff, "Classification of the Agricultural Population of the United States," *Journal of Farm Economics*, Vol. XXXVII, No. 3 (August, 1955), pp. 511-523.

³⁶Statistics for 1959, which are for the conterminous United States, were tabulated from U. S. Bureau of the Census, *U. S. Census of Agriculture: 1959*, Vol. I, Parts 1-48.

TABLE A-3—Farms by economic class of farm, for the conterminous United States, 1954

Economic Class of Farm ^(a)	Number	Percentage
Class I	134,003	2.8
Class II	448,945	9.4
Class III	706,929	14.8
Class IV	811,965	17.0
Class V	763,348	16.0
Class VI	462,427	9.7
Part-time	574,575	12.0
Residential	878,136	18.4
Abnormal	2,693	0.1
Total	4,783,021	100.0

(a) For definitions see U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, p. xxxi. Note: Details may not add to totals because of rounding.

Source: U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, Ch. XI, Table 3, p. 1162.

1954 through 1959. The estimates for 1954 and 1959 were taken from the Censuses of Agriculture. Estimates for other years were interpolated with the assumption that the change in the number of farms was uniformly distributed over the 5 year period. No adjustment was made to account for under-numeration of farms in the Censuses. It will be noted that the number of commercial farms (farms with gross sales of \$2,500 or more) remained nearly constant during the period from 1954 to 1959. Most of the decrease in number of farms occurred among farms with sales of less than \$2,500.

TABLE A-4—Farms by economic class of farm, for the conterminous United States, 1959

Economic Class of Farm ^(a)	Number	Percentage
Class I	101,835	2.8
Class II	210,162	5.7
Class III	482,478	13.0
Class IV	653,150	17.7
Class V	616,819	16.7
Class VI	348,473	9.4
Part-time	881,883	23.8
Part-retirement	403,527	10.9
Total ^(b)	3,697,327	100.0

(a) For definitions see source.

(b) Excluding abnormal farms.

Source: Tabulated from U. S. Bureau of the Census, *U. S. Census of Agriculture: 1959*, Vol. I, Parts 1-48, Table 17, various pages.

TABLE A-5—Number of farms, as defined in the 1954 Census of Agriculture, with sales of \$2,500 or more and of less than \$2,500, for the conterminous United States, 1954-1959

Year	Sales of \$2,500 or more	Sales of Less than \$2,500	All Farms ^(a)
1954	2,101,842	2,678,486	4,780,328
1955	2,094,362	2,515,938	4,610,300
1956	2,086,882	2,353,390	4,440,272
1957	2,079,403	2,190,841	4,270,244
1958	2,071,924	2,028,293	4,100,217
1959	2,064,444	1,865,745	3,930,189

^(a)Excluding abnormal farms.

Note: The change in definition affected only the number of farms with sales of less than \$2,500. The estimate of the number of farms with gross sales of less than \$2,500 in 1959, includes all farms, except abnormal farms, with sales of less than \$2,500 as enumerated in the 1959 Census plus the number of farms excluded by the change in definition.

Source: Estimates for 1954 and 1959 are for farms enumerated in the Census of Agriculture. Estimates for inter-census years were interpolated with the assumption that the change in the number of farms was uniformly distributed over the 5 year period.

It may be assumed that the number of farm operators involved in the operation of commercial farms is understated by the Census of Agriculture because of farms missed in the Census enumeration and the exclusion of extra farm-operator partners. Estimates from a post-Census survey by the Bureau of the Census indicated that approximately 90,276 farms with gross sales of \$2,500 or more were missed in the 1954 Census of Agriculture.³⁷ This was the equivalent of 4.3 percent of the commercial farms enumerated in the Census. Unpublished estimates used in expanding sample data from the 1955 Survey of Farmers' Expenditures indicate that the number of extra farm-operator partners involved in the operation of commercial farms was equal to approximately 1.8 percent of the number of commercial farms.³⁸

The number of commercial farm operators for the period from 1954 through 1959 is given in Table A-6. These estimates were based upon the assumption that the number of under-enumerated commercial farms in the 1954 and 1959 Censuses of Agriculture was equal to 4.3 percent of the commercial farms counted in the Censuses, and that the number of extra farm-operator partners was equal to 1.8 percent

³⁷This estimate is based upon the assumption that the 1954 Census of Agriculture accounted for 97.5 percent of all Class I, II, and III farms and 93.4 percent of all Class IV farms. See U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, p. xxxiv.

³⁸To account for extra farm-operator partners in the 1955 survey, it was estimated that the number of extra partners was equal to 4.8 percent of the number of Class I and II farms and 0.7 percent of the number of Class III, IV, and V farms. The estimate of 1.8 percent represents a weighted average based upon the assumption that the number of extra partners was equal to 4.8 percent of the number of Class I and II farms and 0.7 percent of the number of Class III and IV farms.

TABLE A-6—Number of farm operators associated with farms having sales of \$2,500 or more, for the conterminous United States, 1954-1959

Year	Number of Farm Operators
1954	2,231,681
1955	2,223,740
1956	2,215,797
1957	2,207,856
1958	2,199,915
1959	2,191,973

Source: See text.

of the number of commercial farms. Also, it was assumed that the change in the number of commercial farm operators was uniformly distributed over the 5 year period.

Comparison of the number of farm operators associated with farms having gross sales of \$2,500 (Table A-6) and the number of persons reporting agricultural self-employment earnings for Social Security coverage (Table A-1) reveals that the OASDI farm-operator labor force has exceeded the number of commercial farm operators during the period from 1955 through 1959. The number of persons reporting farm earnings for Social Security coverage in the first few years after the coverage of farm operators includes a disproportionately high percentage of persons who were able to qualify for Social Security retirement benefits with only two years of coverage. The increase in the size of the OASDI farm-operator labor force after 1955 is chiefly due to the inclusion of approximately 200,000 materially participating farm landlords beginning in 1956. By 1959, the number of persons reporting farm earnings for Social Security coverage was approximately equal to the number of commercial farm operators.

In 1957, about 2.2 million farm operators were associated with farms having gross sales of \$2,500 or more, and about 2.4 million persons reported agricultural self-employment income for OASDI coverage. Excluding approximately 200,000 farm landlords, the number of commercial farm operators was approximately equal to the number of farm operators reporting farm earnings under the Social Security program. Although nearly all commercial farm operators, except those with covered wages of \$4,200 or more, could have participated in the Social Security program on the basis of agricultural self-employment earnings, it should not be concluded that all OASDI farm operators would have qualified as commercial farm operators in 1957. Un-

doubtedly, some commercial farm operators with low net earnings chose to option out of the program, while some persons who would not qualify as commercial farm operators were able to earn coverage credits based upon self-employment earnings in agriculture. However, it seems reasonable to expect that OASDI farm operator data are generally representative of the commercial farm-operator labor force.

A detailed comparison of the OASDI farm-operator labor force and farm operators included in the Census of Agriculture was made by Uel Blank. His comparison of 1955 OASDI farm-operator labor force with farm operators represented in the 1954 Census of Agriculture indicated that, while the 1955 OASDI farm-operator labor force included only 36 percent of all Census farms, OASDI farm operators accounted for approximately 73 percent of all farm products sold.³⁹ Farms with gross sales of less than \$1,200 comprised 40 percent of all Census farms but were represented by only 9 percent of the 1955 OASDI farm-operator labor force, while farms with gross sales of \$5,000 or more made up 27 percent of all Census farms but were represented by 62 percent of the 1955 OASDI farm-operator labor force.⁴⁰ It was estimated that 83 percent of the operators of farms with gross sales of \$5,000 or more in 1955 were represented by sample data on 1955 OASDI farm operators.⁴¹ Blank's analysis clearly indicated that the bulk of the 1955 OASDI farm-operator labor force would have qualified as commercial farm operators and that a high percentage of all commercial farm operators were included among OASDI farm operators in 1955.

It seems reasonable to assume that, for most purposes, sample data on the OASDI farm-operator labor force is generally representative of farm operators associated with commercial farms. It has been estimated that there were approximately 2.2 million commercial farm operators in 1957 and that, excluding approximately 200,000 materially participating farm landlords, about 2.2 million farm operators qualified for Social Security coverage on farm self-employment earnings in 1957. Furthermore, assuming a sampling ratio of 1 percent, 2,185,900 OASDI farm operators were represented, in 1957, by sample data from the 1937-58 Continuous Work-History Sample. These data include materially participating farm landlords on the same basis as bona fide farm operators.

³⁹Uel Blank, *OASI Data of the Farm Labor Force* (unpublished Ph.D. Thesis, Department of Agricultural Economics, Michigan State University, 1960), p. 131.

⁴⁰*Ibid.*

⁴¹*Ibid.*

Regional Distribution of the Farm-Operator Labor Force

Information on farm location, which was unavailable for the 1955 OASDI farm-operator labor force, was available for persons reporting agricultural self-employment earnings for Social Security coverage in 1957.⁴² The distribution of the 1957 OASDI farm-operator labor force by geographic region is given in Table A-7.⁴³ Approximately 51 percent of the 1957 OASDI farm-operator labor force was in the North Central States. About 29.5 percent of all 1957 OASDI farm operators were in the West North Central region, and about 21.6 percent were in the East North Central region. None of the remaining regions had as much as 10 percent of the total labor force.

TABLE A-7—1957 OASDI farm operators by geographic region, for the conterminous United States

Region	Number	Percentage
Northeast	159,200	7.3
East North Central	472,200	21.6
West North Central	647,900	29.5
South Atlantic	207,300	9.5
East South Central	187,100	8.6
West South Central	194,000	8.9
Mountain	106,400	4.9
Pacific	112,700	5.2
Unknown	99,100	4.5
Total	2,185,900	100.0

Note: Estimated from sample data.

Source: 1937-58 Continuous Work-History Sample

The geographic location of 4.5 percent of the 1957 OASI farm operators included in the Continuous Work-History Sample could not be determined. Persons in this group apparently failed to complete certain items included on the Social Security tax return. Since this group of individuals closely resembled the remainder of the 1957 OASDI farm-operator labor force with respect to age, sex, and race, it may be assumed that persons not reporting location of farm were distributed geographically in proportion to the location of the remainder of the labor force. Because certain other items of information were not re-

⁴²Blank's study of regional variations in the 1955 OASDI farm operator labor force relied on the geographic area code included in the Social Security account number issued to each individual. This code identifies the area in which the account number was issued but does not necessarily indicate location of the farm from which self-employment earnings are currently received.

⁴³The regional classification used throughout this study corresponds with that used in the 1955 Survey of Farmers' Expenditures but differs from the classification used in the Census of Agriculture. As used herein, the Northeast region includes the New England and Middle Atlantic states plus Delaware and Maryland. See Appendix II for a listing of the states included in each region.

ported by those who failed to report location of farm, this group is excluded from consideration in most cases.

Regional statistics on the farm-operator labor force are not available from the Current Population Survey, but the geographic distribution of 1957 OASDI farm operators can be compared with the distribution of farms enumerated in the Census of Agriculture. Table A-8 gives the percentage distribution for farms included in the 1954 and 1959

TABLE A-8—Percentage distribution of farms enumerated in the Censuses of Agriculture, for the conterminous United States, 1954 and 1959

Region	All Farms		Commercial Farms ^(c)	
	1954 ^(a) (1)	1959 ^(b) (2)	1954 (3)	1959 (4)
	(Percent)			
Northeast	7.9	7.7	9.1	8.3
East North Central	16.7	18.0	21.8	20.9
West North Central	18.9	21.4	28.9	29.0
South Atlantic	17.1	15.2	11.1	11.3
East South Central	16.5	15.2	7.7	9.0
West South Central	14.0	13.3	10.5	11.1
Mountain	3.8	4.0	5.0	5.0
Pacific	5.1	5.2	5.9	5.4
Total	100.0	100.0	100.0	100.0

^(a) 1954 definition.

^(b) 1959 definition.

^(c) Farms with gross sales of \$2,500 or more.

Source: Col. 1 and 3—Calculated from U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, Ch. XI, Table 3, pp. 1162-1167. Col. 2 and 4—Calculated from U. S. Bureau of the Census, *U. S. Census of Agriculture: 1959*, Vol. I, Parts 1-48, Table 1 and Table 17, various pages.

Censuses of Agriculture by geographic region. Comparison of the regional distribution of all farms in 1954 and 1959 is restricted by the change in definition of a farm, but the distribution of farms with gross sales of \$2,500 or more is comparable for the two Censuses. During the 5 year period from 1954 to 1959, four regions had relative increases in number of commercial farms. Only one region, however, had a change of as much as one percentage point. This was the East South Central region, which had 9.0 percent of all commercial farms in 1959 as compared with only 7.7 percent in 1954.

The number of commercial farms and the number of 1957 OASDI farm operators by geographic region are given in Table A-9. It will be noted that relatively more 1957 OASDI farm operators than operators of commercial farms, as defined in the Census, were located in the North Central states, the East South Central states, and the Mountain

TABLE A-9—Number of commercial farms and number of OASDI farm operators, for the conterminous United States and eight regions, 1957

Region	Commercial Farms ^(a)		OASDI Farm Operators	
	Number (1)	Percentage (2)	Number (3)	Percentage (4)
Northeast	178,845	8.6	166,760	7.6
East North Central	442,189	21.3	494,624	22.6
West North Central	601,688	28.9	678,668	31.1
South Atlantic	233,183	11.2	217,144	9.9
East South Central	176,630	8.5	195,985	9.0
West South Central	226,714	10.9	203,213	9.3
Mountain	104,083	5.0	111,453	5.1
Pacific	116,072	5.6	118,052	5.4
All regions	2,079,403	100.0	2,185,900	100.0

^(a)Farms with gross sales of \$2,500 or more.

Source: Col. 1—Interpolated from the number of farms enumerated in the 1954 and 1959 Censuses of Agriculture with the assumption that the change in the number of commercial farms in each region was uniformly distributed over the 5 year period. Col. 2—Calculated from column 1. Col. 3—Estimated from the 1937-58 Continuous Work-History Sample. Col. 4—Same as column 3.

states. Relatively fewer 1957 OASDI farm operators were found in the Northeast, South Atlantic, West South Central, and Pacific states. Only in the West North Central region, however, did the proportion of commercial farm operators and the proportion of OASDI farm operators differ by as much as two percentage points. As a percentage of the estimated number of commercial farms, the number of OASDI farm operators in 1957 ranged from a low of 89.6 percent in the West South Central states to a high of 112.8 percent in the West North Central states. Assuming a sampling ratio of 1 percent, the 1957 OASDI farm-operator labor force represented by the 1937-58 Continuous Work-History Sample was equal in size to 105 percent of the number of farms with gross sales of \$2,500 or more.

Characteristics of Farm Operators

Age, race, and sex are three characteristics which provide useful information concerning the nature of the farm-operator labor force represented by OASDI sample data. This section examines the composition of the 1957 OASDI farm-operator labor force with regard to these three characteristics and, where possible, the composition of the farm-operator labor force represented by other statistics.

Age

For the United States The OASDI farm-operator labor force comprises, in general, more older persons than does the farm-operator

labor force enumerated in the Census of Agriculture. Blank evaluated, in some detail, the age distributions of the 1955 OASDI farm-operator labor force and the farm operators included in the 1954 Census of Agriculture.⁴⁴ He found that the age distribution of all farm operators reporting age in the 1954 Census was similar to that of the 1955 OASDI farm-operator labor force but that the distribution curve of 1955 OASDI farm operators by age was slightly flatter and tended to be bimodal.⁴⁵

The percentage distribution of 1955 OASDI farm operators and farm operators enumerated in the 1954 Census of Agriculture, by age, is given in Table A-10. The median age of the 1955 OASDI farm-operator labor force was 50.1 years as compared with 48.8 years and 48.5 years for all farm operators and commercial farm operators, respectively, reporting age in the 1954 Census of Agriculture. Nearly 41 percent of all 1955 OASDI farm operators were 55 years of age or over, as opposed to 37 percent of all operators of farms with sales of \$1,200 or more. Approximately 17 percent of the 1955 OASDI farm operators were under 35 years of age as compared with 15 percent of all Census operators and 16 percent of the operators of commercial farms in 1954.

Because of the nature of the Social Security program, it is not surprising that a disproportionately high percentage of persons re-

TABLE A-10—Percentage distribution of farm operators by age, for the United States, 1954 and 1955

Age (Years)	1954 Census of Agriculture ^(a)		OASDI Farm Operators in 1955 ^(c) (3)
	All Operators (1)	All Commercial Operators ^(b) (2)	
	(Percent)		
Under 25	1.9	2.2	2.7
25-34	13.2	14.1	14.1
35-44	24.4	23.8	21.3
45-54	24.6	24.8	21.1
55-64	20.3	20.5	22.6
65 and over	16.6	14.6	18.2
Total	100.0	100.0	100.0
Median age (years)	48.8	48.5	50.1

^(a)Includes only the 48 contiguous states.

^(b)Operators of farms with gross sales of \$1,200 or more.

^(c)Includes all states and territories.

Source: Col. 1—U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954* Vol. II, Table 8, p. 87.
Col. 2—Same as column 1. Col. 3—Blank, *OASI Data of the Farm Labor Force*, Table III-I, p. 56.

⁴⁴Blank, "OASI Data of the Farm Labor Force," pp. 55-65.

⁴⁵*Ibid.*, p. 56.

porting farm self-employment earnings for OASDI coverage are in the older age groups. The 1957 OASDI farm-operator labor force tended to be older than either the 1955 OASDI farm-operator labor force or the farm-operator labor force included in the 1954 Census. The median age of 1957 OASDI farm operators was 52.0 years, and one-fifth of the 1957 OASDI farm operators were 65 years of age or over (Table A-11). At the other extreme, only 14.8 percent of the 1957 OASDI farm-operator labor force was less than 35 years of age.

TABLE A-11—Percentage distribution of the 1957 OASDI farm-operator labor force by age, for the conterminous United States

Age	Percentage of All Operators	Cumulative Percentage
Under 20	0.4	0.4
20 - 24	2.0	2.4
25 - 29	4.9	7.3
30 - 34	7.4	14.7
35 - 44	18.7	33.4
45 - 54	22.1	55.5
55 - 64	24.5	80.0
65 - 74	15.0	95.0
75 and over	5.0	100.0

Note: Estimated from sample data.

Source: 1937-58 Continuous Work-History Sample.

Blank attributed the relatively flatter age distribution of the 1955 OASDI farm-operator labor force, as compared with farm operators included in the 1954 Census, to the inclusion of extra partnership operators in the OASDI labor force and to the incentives for older persons to qualify, if possible, for Social Security benefits.⁴⁸ These explanations apply equally to the 1957 OASDI farm-operator labor force. In addition, the 1957 OASDI farm-operator labor force includes materially participating farm landlords who would not have been included as farm operators in the Census and who were not included in the 1955 OASDI farm-operator labor force. The hypothesis is suggested that farm landlords tend to be older than bona fide farm operators and that the higher proportion of older persons in the 1957 OASDI farm-operator labor force is due, at least partially, to the inclusion of materially participating farm landlords. Some evidence bearing upon this hypothesis can be offered.

⁴⁸*Ibid.*, pp. 57-58. However, it should also be noted that farm operators enumerated in the Census may tend to understate age. See, for example, Hugh H. Wolfenden, *Population Statistics and Their Compilation* (Rev. Ed.; Chicago: The University of Chicago Press, 1954), pp. 53-59.

The 1957 OASDI farm-operator labor force comprises four mutually exclusive coverage groups. These groups, classified on the basis of years in which self-employment earnings from agricultural sources were reported for Social Security coverage, are defined as follows:

1. Persons with covered earnings from agricultural self-employment in each of the years 1955, 1956, and 1957.
2. Persons with covered earnings from agricultural self-employment in 1957 only.
3. Persons with covered earnings from agricultural self-employment in 1956 and 1957 but not in 1955.
4. Persons with covered earnings from agricultural self-employment in 1955 and 1957 but not in 1956.

This method of classification distinguishes most people who qualified for Social Security coverage as materially participating farm landlords from those who were bona fide farm operators. Of the nearly 2.2 million 1957 OASDI farm operators represented by the 1937-58 Continuous Work-History Sample, approximately 1.4 million persons had covered agricultural self-employment earnings in each of the years 1955, 1956, and 1957. About 100,000 persons reported agricultural self-employment earnings in 1955 and 1957 but not in 1956; about 270,000 persons reported earnings from agricultural self-employment in 1957 only; and about 400,000 persons reported agricultural self-employment earnings in 1956 and 1957 but not in 1955. Since the rental income of materially participating farm landlords has been covered by the Social Security program only for years after 1955, most of the farm landlords are no doubt included in the group with covered earnings from agricultural sources in 1956 and 1957, but not in 1955.

The percentage distribution of 1957 OASDI farm operators by age, for each coverage group, is given in Table A-12. The median ages of farm operators in the four groups ranged from 48.2 years for persons with agricultural self-employment coverage in 1955 and 1957 to 55.4 years for persons with agricultural self-employment coverage in 1956 and 1957. Approximately 27 percent of the persons in the latter group were 65 years of age or over as compared with no more than 19 percent in any of the other three groups. Thus, it is suggested that the inclusion of materially participating farm landlords has been responsible for the disproportionately high percentage of older persons in the 1957 OASDI farm-operator labor force.

The group of 1957 OASDI farm operators with agricultural self-employment coverage in each of the years 1955, 1956, and 1957,

TABLE A-12—Percentage distribution of the 1957 OASDI farm-operator labor force by age, for agricultural self-employment coverage groups, for the conterminous United States

Age (Years)	Agricultural Self-Employment Coverage Pattern			
	1955-56-57	1955-57	1956-57	1957
	(Percent)			
Under 20	0.1	0.2	0.5	2.2
20 - 24	0.9	2.6	3.0	5.8
25 - 29	4.2	6.2	5.7	7.4
30 - 34	7.7	9.5	6.4	6.6
35 - 44	20.5	21.9	13.2	16.6
45 - 54	22.9	25.8	19.0	20.9
55 - 64	25.0	19.9	24.8	22.2
65 - 74	14.8	10.5	18.5	12.5
75 and over	3.9	3.4	8.9	5.8
Total	100.0	100.0	100.0	100.0
Median age (years)	51.7	48.2	55.4	50.0

Note: Estimated from sample data.

Source: 1937-58 Continuous Work-History Sample.

presumably excludes most materially participating farm landlords and older persons who were able to qualify for retirement benefits after receiving coverage in only two years. As compared with commercial farm operators enumerated in the 1954 Census of Agriculture, however, this group also included more persons 65 years of age or over and fewer persons under 35 years of age.

For geographic regions Among 1957 OASDI farm operators in eight geographic regions, there appears to be substantial differences in age. The median age of 1957 OASDI farm operators ranged from a low of 49.0 years in the Mountain states to a high of 56.7 years in the East South Central states (Table A-13). OASDI farm operators in the South generally tended to be older than OASDI farm operators in either the North or the West. More than one-fourth of the 1957 OASDI farm operators in the South Atlantic and East South Central states were 65 years of age or over. The disproportionately high number of older persons in these regions seems to be associated with the agricultural self-employment coverage pattern of the farm operators. Approximately 25 percent of the 1957 OASDI farm-operator labor force in the South Atlantic states and 24 percent in the East South Central states had agricultural self-employment coverage in 1956 and 1957, but not in 1955. No more than 19 percent of the farm operators in the remaining regions were included in this coverage group. The median ages of

persons with agricultural self-employment coverage in 1956 and 1957 only were 57.1 years and 58.5 years in the South Atlantic and East South Central states, respectively.

The preponderance of persons with agricultural self-employment coverage in 1956 and 1957 but not in 1955 does not, however, account for the age differential between 1957 OASDI farm operators in the South Atlantic and East South Central states and those in other states. The median ages of persons with agricultural self-employment coverage in each of the years 1955, 1956, and 1957 were 53.7 years in the South Atlantic states and 56.8 years in the East South Central states. These estimates exceed the median ages of all 1957 OASDI farm operators in each of the other six regions. Although the inclusion of materially participating farm landlords in the Social Security program may have resulted in the coverage of persons who tend to be older than bona fide farm operators, the age differentials among geographic regions are not wholly attributable to variations in the proportion of persons with agricultural self-employment coverage in only years after 1955. There seem to exist genuine differences among regions in the distribution of 1957 OASDI farm operators by age.

TABLE A-13—Percentage distribution of the 1957 OASDI farm-operator labor force by age, for eight geographic regions

Age (Years)	North- east	East North Central	West North Central	South Atlantic	East South Central	West South Central	Moun- tain	Pacific
	(Percent)							
Under 20	0.4	0.5	0.6	0.3	0.2	0.4	0.2	0.4
20 - 24	2.4	2.2	2.3	1.4	1.5	1.2	2.3	1.7
25 - 29	5.2	5.3	6.2	3.7	2.4	3.6	4.9	4.4
30 - 34	8.2	7.1	9.2	5.3	4.3	6.5	8.6	7.1
35 - 44	20.8	18.4	20.8	16.3	14.4	16.2	23.9	17.7
45 - 54	21.0	21.5	22.2	22.5	21.2	24.3	22.4	24.1
55 - 64	23.7	24.2	22.8	25.3	27.3	29.3	18.5	24.9
65 - 74	15.0	15.1	11.8	18.2	20.1	15.0	15.0	15.5
75 and over	3.3	5.7	4.1	7.0	8.6	3.5	4.1	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median age (years)	50.6	52.2	49.4	54.7	56.7	53.6	49.0	52.2

Note: Estimated from sample data.

Source: 1937-58 Continuous Work-History Sample.

The distribution of farm operators enumerated in the 1954 Census of Agriculture, by age, is given in Table A-14 for eight geographic regions. As shown previously, the 1957 OASDI farm-operator labor force tends to include a disproportionately large number of older persons. In contrast with the 1957 OASDI farm-operator labor force Census, however, farm operators in the South Atlantic and East South Cen-

tral states did not tend to be older than farm operators in other regions. Both the median and average ages of Census farm operators in the South Atlantic and East South Central states were lower than the median and average ages of farm operators in the Northeast, West South Central, and Pacific states in 1954.

It may be concluded that OASDI farm operators generally tend to be older than farm operators enumerated in the Census of Agriculture. This age differential is primarily attributable to the inclusion of materially participating farm landlords in the OASDI farm-operator labor force, the incentives for older persons to attempt to qualify for Social Security benefits, and the omission of extra farm-operator partners from the Census of Agriculture.

Race

Income differentials between white and nonwhite workers indicate that race is an important characteristic of the farm-operator labor force. For example, the median income of nonwhite males in the rural-farm population was only \$408 in 1957, compared with \$1,835 for white males.⁴⁷ Consequently, it would appear that the income and employment experiences of the nonwhite labor force merit examination. The

⁴⁷U. S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 30, Table 17, p. 32.

TABLE A-14—Percentage distribution of farm operators reporting in the 1954 Census of Agriculture by age, for eight geographic regions

Age (Years)	North- east ^(a)	East North Central	West North Central	South Atlantic ^(b)	East South Central	West South Central	Moun- tain	Pacific
(Percent)								
Under 25	1.6	1.7	2.0	2.2	2.5	1.8	1.9	0.9
25 - 34	11.6	13.7	16.1	12.7	12.3	11.6	14.5	11.2
35 - 44	22.1	23.3	23.9	24.0	23.3	22.5	25.2	23.7
45 - 54	24.0	23.6	24.2	24.5	24.8	26.1	24.8	25.3
55 - 64	21.8	20.9	19.9	19.3	19.2	21.0	19.7	22.2
65 and over	18.9	16.8	13.9	17.3	17.9	17.0	13.9	16.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median age ^(c) (years)	50.6	49.3	47.8	49.0	49.3	49.9	47.9	50.1
Average age (years)	(d)	49.8	48.3	49.7	49.8	50.2	48.6	50.6

^(a)Excluding Delaware and Maryland.

^(b)Including Delaware and Maryland.

^(c)Calculated by author.

^(d)Unavailable. Average ages for farm operators in the New England and Middle Atlantic States were 51.9 years and 50.6 years, respectively.

Source: U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, Ch. II, Table 19, p. 114.

fact that nonwhite workers tend to have substantially lower earnings than white workers suggests, however, that nonwhite workers may be poorly represented in the OASDI farm-operator labor force.

Although strictly comparable statistics on the racial composition of the farm-operator labor force are lacking, sufficient information is available to indicate the relative number of nonwhite farm operators. Approximately 10.1 percent of the farm operators enumerated in the 1954 Census of Agriculture were nonwhite workers and nearly all of the nonwhite farm operators were Negroes.⁴⁸ In comparison, only 1.6 percent of the 1957 OASDI farm operators included in the 1937-58 Continuous Work-History Sample were Negroes.

Blank argues that the low social and economic status of Negroes has contributed to the low proportion of Negroes reporting agricultural self-employment earnings for Social Security coverage.⁴⁹ Low earnings would certainly preclude the coverage of many Negro farm operators. The Census of Agriculture does not, of course, provide information on net income from farming; but Census data are not inconsistent with the hypothesis that low farm earnings have prevented many Negro farm operators from receiving Social Security credits on agricultural self-employment earnings. Although 70 percent of all nonwhite farm-operators reported gross farm sales of \$1,200 or more in 1954 as compared with 60 percent of all farm operators,⁵⁰ about 60 percent of the nonwhite farm operators were tenants as opposed to only 20 percent of the white operators.⁵¹ Thus, while a higher proportion of nonwhite persons may have operated commercial farms, a much higher percentage of nonwhite farm operators also received only a share of gross farm earnings. Disregarding the differential between net earnings, it would seem that a higher percentage of white than nonwhite farm operators could be expected to have gross farm earnings sufficient to qualify for Social Security coverage.

The number of nonwhite farm operators declined by 41 percent from 1954 to 1959.⁵² Because of the change in the definition of a farm, the hypothesis that a disproportionately large number of nonwhite

⁴⁸U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, Ch. X, Table 2, p. 948. Of the 4,782,416 farms counted in the 1954 Census, 467,656 were operated by Negroes and 15,994 were operated by other nonwhites.

⁴⁹Cf. Blank, *OASI Data of the Farm Labor Force*, pp. 66-67.

⁵⁰U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, Ch. X, Table 19, pp. 990-991 and Ch. XI, Table 3, p. 1162. Tabulated by author.

⁵¹*Ibid.*, Ch. X, Table 3, p. 955.

⁵²Only 285,845 nonwhite farm operators were enumerated in the 1959 Census. U. S. Bureau of the Census, *U. S. Census of Agriculture: 1959*, Vol. I, Parts 1-48, Table 4, various pages.

farm operators were excluded from the 1959 Census by the change in definition is suggested. Final Census reports from 16 southern states⁵³ indicate that 151,130 places were not counted as farms in 1959 because of the change in definition. Only 28,955 of these places (19.2 percent of the places excluded by the change in definition) were operated by nonwhites.⁵⁴ Nonwhites accounted for 20.0 percent of the Census farm operators in the South in 1954⁵⁵ and 16.5 percent in 1959.⁵⁶ Although the proportion of nonwhites among persons excluded from the 1959 Census because of the change in the definition of a farm was slightly larger than the proportion of nonwhites counted in the Census, the substantial reduction in the number of nonwhite farm operators from 1954 to 1959 was apparently caused by the movement of a higher percentage of nonwhite farm operators off the farm and was not merely the result of changes in the definition of a farm. Only 6.3 percent of the change in the number of nonwhite farm operators from 1954 to 1959 was due to the change in definition.

In summary, nonwhite workers accounted for approximately 10.1 percent of the farm operators enumerated in the 1954 Census of Agriculture and 7.7 percent of those enumerated in the 1959 Census. Estimates of employed persons by occupation and color are not available for 1957 from the Current Population Survey, but about 8.5 percent of the persons employed as farmers and farm managers in February 1958, were nonwhite workers.⁵⁷ Approximately 90 percent of the Negro farm operators included in the 1957 OASDI farm-operator labor force were located in the South. Negro farm operators accounted for 8.4 percent of the 1957 OASDI farm operators in the South Atlantic states, 5.6 percent in the East South Central states, and 2.1 percent in the West Central States.

Sex

Although farming is generally regarded as an occupation predominately restricted to males, female workers constituted 6.4 percent of the 1957 OASDI farm-operator labor force. In comparison, an average

⁵³Including Delaware and Maryland.

⁵⁴U. S. Bureau of the Census, *U. S. Census of Agriculture: 1959*, Vol. I, Parts 22-37, Table 10, various pages.

⁵⁵U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*, Vol. II, Ch. X, Table 6, p. 956. Calculated by author.

⁵⁶U. S. Bureau of the Census, *U. S. Census of Agriculture: 1959*, Vol. I, Parts 22-37, Table 1 and Table 4, various pages. Calculated by author.

⁵⁷U. S. Bureau of the Census, *Current Population Reports*, Series P-57, No. 188 (March 1958), Table 16, p. 16.

of 163,000 female workers were included among the 3,304,000 persons classified as self-employed workers in agriculture during the year 1957.⁵⁸ The number of female workers was equal to 4.9 percent of the total number of self-employed farm workers. About the same proportion of persons who were classified as farmers and farm managers in 1957 were female workers.⁵⁹

Females accounted for 7.1 percent of the 4,100,000 income recipients with agricultural self-employment income in 1957.⁶⁰ Relatively fewer females than males reported farm self-employment earnings of \$500 or more, and the percentage of females with sufficient income to qualify for agricultural self-employment coverage might thus be expected to be lower than the percentage of males able to qualify for coverage. Approximately 66 percent of the female income recipients and 44 percent of the male income recipients had farm self-employment earnings of less than \$500 in 1957, and females accounted for only about 4.5 percent of all persons who received agricultural self-employment income of \$500 or more in 1957.⁶¹

The relatively higher proportion of female workers in the 1957 OASDI farm-operator labor force seems due to the inclusion of materially participating farm landlords in the Social Security program. Females comprised only 3.4 percent of all persons with agricultural self-employment coverage in each of the years 1955, 1956, and 1957. Among persons with agricultural self-employment coverage for only years after 1955, females accounted for approximately 13 percent.

The number of female workers included in the 1957 OASDI farm-operator labor force ranged from a low of 5.2 percent of all 1957 OASDI farm operators in the Northeast and Mountain states to a high of 9.8 percent in the South Atlantic States (Table A-15). Although the disproportionately large number of female farm operators in the South Atlantic and East South Central states is associated with a disproportionately large number of persons in these regions who received their first year of agricultural self-employment coverage after 1955, the inclusion of materially participating farm landlords in the Social Security program does not seem to account for regional variations in the percentage of female farm operators. Among persons with agricultural

⁵⁸U. S. Bureau of the Census, *Current Population Reports*, Series P-50, No. 85 (June, 1958), Table 12, p. 35. Average of monthly estimates for the calendar year.

⁵⁹*Ibid.*, Table 13, pp. 36-37.

⁶⁰U. S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 30, Table 27, p. 45.

⁶¹*Ibid.*, calculated by author.

self-employment coverage in each of the years 1955, 1956, and 1957, female workers accounted for about 5.6 percent of the 1957 OASDI farm operators in the South Atlantic states and about 4.2 percent in the East South Central states as compared with an average of 3.4 percent for all regions.

TABLE A-15—Percentage of male and female workers in the 1957 OASDI farm-operator labor force, for eight regions and the conterminous United States

Region	Male Farm Operators	Female Farm Operators
Northeast	94.8	5.2
East North Central	93.2	6.8
West North Central	94.7	5.3
South Atlantic	90.2	9.8
East South Central	91.7	8.3
West South Central	94.5	5.5
Mountain	94.8	5.2
Pacific	93.9	6.1
All regions	93.6	6.4

Note: Estimated from sample data.

Source: 1937-58 Continuous Work-History Sample.